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PULMONARY CONSUMPTION,

SUCCESSFULLY TREATED

WITH

NAPHTHA;

BY

JOHN HASTINGS, M.D.

SENIOR PHYSICIAN TO THE BLENHEIM STREET FREE DISPENSARY.

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P R E F A C E.

AMONG the various diseases which afflict and destroy the human race, there are none so unsparingly fatal, or fraught with such direful consequences as Pulmonary Consumption. No country on the surface of the earth is secure from its ravages, and although it more frequently develops itself in adults, at no period of life are either sex exempt from its visitations. Hooping cough, scarlet fever, measles, and small-pox are still severe scourges; although the latter disease has shown itself less frequently and with less violence since the value of vaccination, as a preventitive remedy, struck the mind of Jenner. The diseases enumerated, not even excepting small-pox when unchecked by vaccination, in the majority of cases, occur during infancy; and frightful as are the results, they fall far short in amount of misery with those of Consumption. This dreaded and dreadful malady steals upon mankind at that age when death is least expected, and when it is indeed painful to the living witness. It is unnecessary, however, to enter into detail, for there are, unfortunately, in the history of most families, too many afflicting instances of the loss of relatives and friends, in the prime of life, from Pulmonary Consumption.

Although various and varied in their character were the works on Pulmonary Consumption before Laennec's time, his vast discoveries, by means of auscultation, have spread over it a new light, and created another era in its history. And since Laennec wrote, the press has teemed with works on this and other affections of the chest, embodying his views, and extending his researches. But, extraordinary as it may appear, our means of cure seem to have diminished, in proportion as our knowledge of determining the character of Consumption has increased; for at no period of its history has it been so fatal as since the discovery of the stethoscope. Nor is it difficult to comprehend how this apparently strange state of things was brought about. Prior to the discovery of the stethoscope, our means of ascertaining the nature of Consumption and other affections of the chest, such as chronic bronchitis and chronic pleurisy, were so confined and imperfect, that they were often taken for each other, which, in the case of actual Consumption, invariably led to the disease assuming its most formidable stage before being detected; whilst the existence of chronic bronchitis and chronic pleurisy being mistaken for Consumption, led to the opinion that the hitherto fatal malady was curable, although there is good reason for believing that it was as untractable then as it has been since. This is not mere opinion, it has been reduced to absolute fact, which, of late, has been so evident, that a great and

important change has been wrought in the minds of the medical profession; the vast majority believing it an incurable disease, whilst the small minority consider that cases do sometimes recover, where the constitutional powers are but little impaired; and they are further supported by Laennec's belief in the cicatrisation of tuberculous cavities, and by Carswell and others, who hold a similar doctrine. Whether these cicatrices are the remains of tuberculous cavities, or belong to some other disease, is a question which ought, for the honour of the medical profession, to have been settled long since. Dr. Hodgkin,* in his work on the Serous and Mucous Membranes, has drawn attention to the puckering of the lung as a consequence of common inflammation of the organ. This appearance bears, at times, no inconsiderable resemblance to the cicatrices attributed to tubercles, and I am strongly disposed to believe that many of the supposed cases of the latter description are really of the former character. For my own part it appears inconsistent with probability, that tuberculous abscess of the lung has ever been cured; for, if it had, how is it that recoveries do not take place upon a repetition of the attested successful treatment? From the vast amount of cases constantly occurring, no difficulty can possibly arise in confirming the fact. It may be

* Lectures on the Morbid Anatomy of the Serous and Mucous Membranes, vol. II, part I, by T. Hodgkin, M.D., p. 96—101.

a question whether it be humiliating to acknowledge our ignorance, but it is most undoubtedly absurd to bring forward a few unequivocal cases to prove the curability of Consumption, which is contradicted in millions of instances by those who have died from this affection, whilst under the care of the best informed medical men in Europe. Since medical men have familiarised themselves with the use of the stethoscope, and appreciated its value, recoveries from bronchitis and pleurisy are no longer registered as Pulmonary Consumption, and the mystery of its being more fatal now than formerly readily explained. It is gratifying to those who early inculcated the doctrine of auscultation, amid a host of opposition, to witness its increasing importance, and to see converts daily using the instrument who were once avowedly amongst its greatest opponents.

And since the optician has improved the microscope, and the microscopist has been unceasingly industrious; a new field of inquiry has been placed before the man of science. Among the causes which led to that state of perfection to which the microscope has now been brought, none stand more prominent than the excellence and cheapness of those of our continental neighbours. This created a praiseworthy spirit of emulation at home, and called forth additional exertions from our machinists, who have at length constructed instruments which are at this moment unrivalled. By means of micros-

copical investigations most of the demonstrative sciences connected with medical subjects have been more or less enriched. Indeed, to notice all the obligations which the physiologist and pathologist alone owe to the microscope would occupy more space than I can spare. But I cannot avoid stating that I am indebted to this invaluable instrument for the discovery of those spherical globules which I have found so constantly present in the expectoration of consumptive persons, and which I look forward to as a certain means of pointing out the disease in an earlier stage than has hitherto been the case.

It is to be deplored that the same routine of treating disease, particularly when it happens to be of a fatal nature, should be so perseveringly followed. Pulmonary Consumption has its cough, its diarrhæa, its perspirations, treated a thousand times over with the same well-known useless remedies. In this way its victims pass on to the grave, without any further effort being made to save them. Canine madness, cancer, and some other diseases, which at present belong to the class of incurable disorders, baffle the ingenuity of medical men, but if an experimental hospital was established, liberally endowed, and the medical officers so well paid that private practice became a secondary consideration, or interdicted altogether, a more full and complete opportunity would be afforded for ascertaining the curability of these affections, than any of our nume-

rous institutions at present offer. From the very first moment I employed Naphtha in Pulmonary Consumption, up to the present time, it has been so successful in my hands, that I have no doubt it will be found upon careful and judicious use, to be little less than a specific in the earlier stages of the disease. This can scarcely be saying too much, when, in the more advanced stages, where some destruction of the lungs has ensued, recovery has most unquestionably been effected. It must, however, be understood that a favourable termination in this stage of the disease is by no means so certain as in those that precede it. These opinions are supported by numerous well-marked cases of recovery, with the names and addresses appended. It is, therefore, presumed that the evidence in favour of the Naphtha treatment will be found so strong, that he who has the least confidence in the powers of the *Materia Medica*, will consider this new remedy, at least, worthy a trial. To the cases recorded in this volume, several might have been added; but as they would have been mere repetitions, from their similarity in symptoms and cure with some one or other of the cases, and thus have swelled the work without giving weight to the evidence, I have not thought it necessary to publish them.

J. HASTINGS, M.D.

14, Albemarle Street,
Piccadilly.

CHAPTER I.

CAUSES OF PULMONARY CONSUMPTION.

WHETHER tubercle be due to an unhealthy condition of the nutritive process, tending to the production of such a morbid condition of the blood as to dispose the organism to generate pulmonary consumption in preference to any other disease, is an opinion, which if admitted, of so vague and indefinite a character, that it throws little or no light on the obscurity of the subject. When we reflect on the varieties of disease which are attributed to impaired nutrition and digestion, we are at a loss to comprehend how these varied affections can be generated by a common cause. For notwithstanding the brilliant researches of Liebig and other philosophers, who have laboured in the field of animal and vegetable chemistry, the first step from health to disease is by no means well marked. It is said that the cause is modified according to the nature of the tissue or organ through which it operates, and that much is due to climate and season. But this, instead of obviating the difficulty, leaves us uninformed how the cause is altered or modified so as to create gout or

pulmonary consumption at one time, and a skin affection at another.

By far the most common of the various incitements to the propagation of tubercle is the hereditary cause, which must, as a matter of course, precede any change in the nutritive process. Hence we are involved in a labyrinth of conjecture upon this subject, which some day or other may be unravelled, should our optical instruments ever reach that state of perfection which will enable us to see the molecular arrangement of matter both in its gaseous and fluid state while undergoing those changes necessary for the production of organised bodies.

No cause, the hereditary excepted, to which the majority of my recorded cases are attributable, is more prominent in engendering pulmonary consumption than the application of cold to the surface of the body. The lady of fashion, who, lightly clad and in a state of perspiration, passes from the heated ball-room through cold passages into the open air to her carriage, is not less likely to fall a victim to the disease through her imprudence, than those of the poorer class who are unable to procure sufficient clothing to protect themselves during the inclement season. Disease arising from these sources is of daily occurrence, and numerous are the victims to consumption from the effect of damp clothes and beds. Climate and other local causes, such as bleak situations, are as much the predisposing

causes, as depressing passions, general debaucheries, and all circumstances which prostrate the mind and lower the vital actions, are the fruitful sources of pulmonary consumption.

Continued fever has been, by some observers, ranked among the occasional causes of the disease, and I have now under my care a young man scarcely recovered from intermittent fever, who is labouring under a well-marked attack. Previous to the appearance of the fever he enjoyed excellent health, and a tendency to consumption has not shewn itself in his family. His spleen and liver are now considerably enlarged.

Women are unquestionably more liable to pulmonary consumption than men; for out of nine thousand five hundred and forty-two deaths which occurred at Paris, five thousand five hundred and forty-two were women. This difference has been very properly attributed to a feebleness of constitution, which often arises from tightly lacing the chest, and other defects in the training. Exposure of the chest is regarded by some practitioners as an additional exciting cause.

That pulmonary consumption is hereditary there can be no doubt, from the abundant evidence at our disposal. Children who have lost both parents from consumption are more liable to this affection than those deprived of but one; while the family of consumptive parents frequently enjoy excellent health, and are even strong rather than weak in the chest. On the

other hand whole families are swept off, the parents remaining healthy.

The contagious nature of pulmonary consumption is a question of great importance, and no opportunity should be neglected, no circumstance be left unnoticed, which will tend to solve the problem. The contagious nature of scarlet fever, of small-pox, and of measles is not doubted, although but little is known of the laws of transmission from one person to another. Among my recorded cases, there is the history of two married women, under thirty years of age, restored to health; the one having been for a considerable period in attendance upon her consumptive husband, previous to which she was in good health, her family being as healthy as herself; the other having been nurse during six months to her sister-in-law, and, as in the former case, previously healthy, and even robust in person, neither was there in her family, as far as I could learn, a consumptive taint.

Andral has repeatedly noticed similar facts, and I would, therefore, earnestly recommend those who are engaged as nurses in consumptive diseases, whether they are husbands, wives, sisters, brothers, or servants, not to sleep in the same bed with the patient, or to remain even within the distance of two or three feet longer than is absolutely necessary, particularly if they are under thirty years of age. Relatives, from that affection inherent in man, will often be induced to disregard this caution; nevertheless, it is a duty the

medical man owes to society, to strongly insist upon the adoption of those means which he believes have a tendency to prolong, or shorten the duration of life.

According to Andral,(1) Langston Parker,(2) and others, that which has been termed strumous dyspepsia, or dyspeptic phthisis, frequently ushers in the more well marked symptoms of pulmonary consumption; but as this malady is not always co-existent with dyspepsia, the question arises if it be anything more than a complication similar to those of the heart and liver, with which it is often associated. From numerous statistical records, it has been satisfactorily proved, that persons employed as dry grinders, clerks, and tailors, are liable to suffer from pulmonary consumption, as well as those engaged in cutting through sandstone, in order to recover a lost vein of coal; whilst butchers, poulterers and tallow chandlers, are remarkably exempt from its visitations.

(1) Clinique Médicale, by Spillan, p. 519.

(2) The Stomach in its Morbid State, by Langston Parker, 1838, p. 232.

CHAPTER II.

SYMPTOMS OF PULMONARY CONSUMPTION.

IN the early deposition of tubercles in the lungs, where they are scattered and few in number, it is very difficult to detect them; notwithstanding they offer a sufficient obstacle to inspiration and expiration, as to produce slight cough, which often precedes the more doubtful signs of pulmonary consumption; this state continues in some persons, without apparently making a step in advance, for a considerable but indefinite period, where the disposition for the development of the disease is feeble, and all exciting causes avoided. At this time, prolonged expiration is a symptom often present, which has attracted but little attention in this country, although it has been long recognised by continental observers. As there are so few symptoms in the early stage of pulmonary consumption to point out its existence, this cannot fail to be regarded as one of great value. When tubercles are deposited in the more central parts of the lungs, the circumference remaining uncontaminated, they are detected with great difficulty, and frequently

altogether escape notice. Mr. Henderson during our sojourn in Paris in 1840 and 1841, as a means of detecting these deep seated tubercles, as well as those deposited in cases of early pulmonary consumption, was accustomed to percuss either the anterior, or posterior walls of the chest, and then apply his ear to the opposite side, with the expectation that the sound would be so modified by the dense structure of the tubercles, as to enable him to decide on their existence. This ingenious plan was abandoned by Mr. Henderson in consequence of its failure in producing those practical results which he expected. Dr. Williams,(3) however, who has recently called the attention of the public to this method, may be more successful.

Authors from an early period have recognised a class of symptoms, which have been grouped under one head and called by Sir James Clark,(4) tubercular cachexy, as indicative of an early stage of pulmonary consumption. As this condition neither precedes or exists at any time in some cases, it would appear to be attributable to complication. It is known, that patients far advanced in disease often seek relief for the first time, without being previously aware of their

(3) Medical Gazette, p. 404, December 16th, 1842.

(4) The Influence of Climate, &c., by Sir James Clark, M.D. Second edition, p. 320.

danger, although upon close interrogation many of the signs of this^{*} cachectic state were present.

Some individuals from deficiency of moral courage blind themselves to their own condition, by refusing their consent to the well marked symptoms of the disease; while others in complaining are subjects of ridicule from their blooming cheeks and other signs of health, and thus the disease progresses to an advanced stage before seeking medical aid. Probably most cases of pulmonary consumption, prior to the deposition of tubercles, are preceded by some more or less general deterioration in the system due to a vitiated state of the blood, and as this is the great fountain of supply whence the body draws its support, it is not difficult to understand how it deranges all the functions, and paves the way to fatal diseases. Nevertheless cases, as I have shown, now and then occur, where cachectic symptoms are altogether wanting. This may arise from a kind of purification the blood undergoes through depositing its poisonous tubercles in the lungs so immediately after their formation in the blood or elsewhere, that no constitutional derangement or tubercular cachexy is manifested in the system.

Tubercular cachexy is often ingrafted in persons with chests below the ordinary size, at the same time the skin is thin and transparent and of a dirty hue, the eyes are light blue, or dark brown, dull and

glassy, and the countenance sallow and faded, the hair is light brown, or black, the joints large, and the finger nails disposed to bend round the pulp of the fingers. The tongue is white and furred at the base, the appetite is variable, the bowels alternate between constipation and diarrhæa, or are wholly constipated. Flatulence and pain exists at the pit of the stomach after meals, which in females is accompanied with palpitation and faintings. Menstruation is irregular in time, quantity, and quality, headache is present, the feet cold, the action of the heart feeble, and the pulse below the natural standard,(5) the muscles of voluntary motion are softer than usual, and there is great disinclination to exertion, and the temper is unusually variable and irritable.

Tubercles first show themselves in the superior portion of the lungs, and the left lung is said first to be attacked. Their existence is characterised at this early stage by dry cough, or cough and expectoration of a semi-transparent white mucus, which varies in quantity and frothiness. Sometimes the expectoration is blackish, owing to the inhalation of carbonaceous matter existing in the atmosphere of crowded cities; the cough is often harassing, and muscular effort is mostly attended by impeded respiration, particularly

(5) King's College Hospital Report, by W. A. Guy, M.B. Medical Gazette, March 10th 1843, p. 850.

on ascending a hill, or a staircase. At this period, the disease may generally be recognised by its physical signs. On percussing the walls of the chest, a dull sound is at one time perceived over both sub and supra clavicular and scapular regions, at another only one side, which most frequently proves to be the left.

When one side is found to yield this dull sound, an increased sonoriety may be detected over the other, the murmur of inspiration will then be augmented in intensity, or, in other words, it will be puerile; whilst on the opposite side it will be diminished or feeble, and will have a peculiar harsh or rough character. In more advanced cases, dulness from percussion will be common over all the superior portion of the chest, and the respiratory murmur, at parts, will sometimes be absent or replaced by a dry crackling *râle*; over other spaces it will be loud and rough. Inspiration will now and then be performed by jerks; expiration will frequently be loud and prolonged, which is occasionally a symptom amongst the earliest noticed. The sounds of the heart will be now very distinct over the dull spaces, from the condensation which has taken place in the lungs; and which, from their having acquired a greater density through the deposit of tubercles, become in consequence better conductors of sound. As the cough, expectoration, difficulty of breathing, hectic fever, and debility increase, depressions in the walls of the chest become

manifest, varying in extent and situation according to the part and portion of the lungs which become collapsed, independent of any wasting of the muscles, cellular tissue, or skin; in consequence of which the movements of the chest are diminished, and its measurements altered. Eventually the tubercles form themselves in such masses, that they exclude the atmosphere from the air cells and the minute *bronchi* in their immediate neighbourhood, which is probably owing to mechanical pressure, and thus the admission of air beyond the larger branches is prevented. Then tubular breathing is developed, the respiratory murmur disappears, and the voice is heard at the distal end of the stethoscope, or, in other words, *bronchophony* is present. Sometimes the tubular murmur is blended with the dry crackling *râle* and sibilant and sonorous rattles.

When hardened tubercle has softened and discharged its contents, a clear sound is sometimes the result of percussion, and a cavernous or blowing murmur is heard over the spaces it had occupied; the voice traverses the whole length of the stethoscope, and speaks as it were into the ear. This *pectoriloquy* is more or less evident the nearer or farther the excavation is from the central part of the lungs. The countenance assumes a leaden hue, and the system is often harassed with colliquative diarrhæa and perspirations, and towards the close of the disease obstinate costiveness often ensues. The character of the expecto-

ration, at first thin, viscid, and colourless, then opaque, greenish yellow, and of a thicker nature, has now become of a creamy consistence, containing within it small bodies of a dense character, combined with a little frothy secretion, and occasionally stained and streaked with blood; and globules of tubercle, as well as a *cryptogamic* plant, are readily detected by the microscope. After the discharge of a large tubercular mass, improvement not unfrequently takes place, which only lasts until another crude portion is ripened; and in this way, step by step, the patient sinks.

Sometimes, but less frequently than is generally believed, the early symptoms of pulmonary consumption are ushered in by spitting blood, which returns at uncertain intervals; the ordinary train of symptoms then follow, and the disease runs its usual course.

CHAPTER III.

COMPLICATED FORMS OF PULMONARY CONSUMPTION.

IF pulmonary consumption is defined to be a deposition of tubercles in the lungs, then all those diseased states accompanying it, as well as those arising from tubercular deposit in other organs, must be considered to be complications of consumption. Taking then this view of the subject, that species of dyspepsia called strumous must certainly belong to the complications, instead of being itself a stage of pulmonary consumption. For sometimes the disease runs its course unaccompanied with dyspepsia, and dyspepsia is a very common affection in persons uncontaminated with pulmonary consumption. Hence we may conclude that its strumous character depends on the accidental circumstance of its being engrafted on a consumptive constitution. It might, moreover, *a priori*, be expected that dyspepsia would exist during an attack of consumption, from the enfeebled state of the organisation then present, combined with irregular appetite.

Under the head of complications, are fatty dege-

neration of the liver, and diseases of the heart. The symptoms of the former are so obscure as to afford little indication of its existence; while both functional and structural diseases of the heart are to be detected in their earliest stages. Both are found co-existing with consumption, but in this country the former less frequently occurs. Functional disease of the heart is often conjoined with dyspepsia, and is probably due to reflex-action. It manifests itself by palpitation, faintness, irregularity of pulse, difficulty of breathing, and on the application of the ear or stethoscope over the left ventricle by a bruit. Structural disease of the heart is more commonly met with in an after stage of consumption, such as dilatation, with sometimes *hypertrophy* and valvular disease.

That these affections are not of more frequent occurrence is a matter of astonishment, when the opposition the blood meets with in traversing the lungs is taken into consideration. Where the disorganisation of these organs has proceeded to a great length, regurgitation takes place in the right ventricle, and great muscular effort is necessary to drive the blood onwards, which accumulates in its cavity from the right auricle and pulmonary artery. The effect of this morbid state more or less influences all the cavities of the heart; the right auricle is unable to propel its contents without unusual efforts, in consequence of the almost constant fulness of the right ventricle;

CHAPTER IV.

PATHOLOGICAL CONDITION OF PULMONARY CONSUMPTION.

TUBERCLES, when examined under the field of the microscope, appear to be composed of globules, differing only from those found in pus by their form being less perfectly round, and by their having sometimes a sort of undefined, ragged edge, and, when placed in water, being found to undergo no change for a considerable time; whereas pus globules, when put in water, are soon altered in appearance. Such was the opinion Gruby, the celebrated microscopist of Vienna, expressed to me in Paris in 1841. Since I have been investigating the microscopical character of tubercle, the expectoration of a considerable number of persons suffering from pulmonary consumption have met with my most careful attention. This has led me to observe, what as far as I am aware has hitherto been unnoticed, another description of globule, of a spherical form, variable in size, but inferior to that of a pus globule; its appearance is that of a small milk or oil globule, and as far as I have been able to distinguish contains neither granules or nuclei. These globules, in

the perfect state, may be seen by submitting to the field of the microscope a comminuted portion of hardened tubercle; the greater part, however, of the mass will be found composed of irregularly shaped bodies, which is attributable, in my opinion, to compression; and that if allowed further to develop themselves or ripen they would assume the spheroidal form. Should these globules be identified with tubercle, it will be possible to determine the character of consumption at a very early stage.

The Cryptogamic plant, first, I believe, observed by Dr. John Hughes Bennet, and recorded in the Transactions of the Royal Society of Edinburgh, I have invariably found present in the expectoration of consumptive persons, and if peculiar to this disease, is highly important. In order to ascertain whether this minute plant was generated in the lungs, I cut through a hard tubercular mass, and immediately placed the central portion under the field of the microscope, when several fine specimens were perceptible.

I have not had an opportunity of searching for the globules I have mentioned in the blood of consumptive patients, as I rarely employ blood-letting either local or general. That tubercles exist in the blood before they are deposited in the solids may be inferred from the fact, that upon examination after death almost every organ of the body is found more or less covered and infiltrated with them; a condition which it is difficult to

understand, except upon the supposition that the disease previously existed in the blood. A careful examination of the blood of consumptive patients is highly necessary in order to confirm, if possible, the opinion of Liebig, that there is in this disease a deficiency of blood globules, or, as he calls them, "oxygen carriers."

Of the phenomena of pulmonary consumption, the systematic deposit of tubercles in the superior part of the lungs is the most extraordinary. Whether they are held in solution by the blood, and precipitated within the lungs, after the carbonic acid gas and water has been given off which previously held them in solution, is a problem not easily solved. Again, whether the changes which ensue reciprocally in the blood and air contained within the lungs are carried on to a greater extent in the upper lobes than in the middle or lower, and in this way become more liable to disease, is also a difficult question to answer.

Tubercles have been described and named, according to their size, seat, colour, and consistence, as if they were *ab initio* different; whilst there is good reason for believing that they have a common origin. As far as the naked eye can discern, their first appearance is of a transparent grey colour, and of the size of a millet seed. These appear to augment in size, until they are sometimes met with as large as a walnut,

when they are found to be of a cheesy friable consistence, and unless the colour is altered by an accidental circumstance, is then of a yellowish opaque white.

Sometimes the tubercles are first deposited in the left lung and then appear in the right, or beginning in the right they terminate in the left; and as they increase and multiply they more nearly approach each other until the air cells are compressed, and eventually obliterated. The masses now become united, and the blood vessels, like the air cells, are destroyed and removed by the absorbents. The tubercles, by some maturative or vital process of their own, after having enlarged to a greater or lesser extent, begin to soften in their centre, which gradually extends to the circumference, until a pervious bronchial tube is reached through the means of ulceration, when the softened tubercles find a ready exit, mixed with the bronchial secretion and saliva. In this way caverns or vomica are generally formed. Here then are traceable three very distinct stages from the period of the deposition of tubercles in the lungs to their expulsion. In the first stage they exist in a fluid or soft state; in the second they become erude or hard; and in the third they approximate to the first stage, by returning to the softened condition.

Tubercles once generated in the system have the power of appropriating to themselves those materials which, under healthy circumstances, tend to form the

necessary tissues of the body; by which means they multiply the *vis medicatrix natura* being unable to resist the morbid action, and thus the carbon, hydrogen, and oxygen existing in the system, whether in the form of fat or any other normal product, is brought within its all powerful influence, and thus step by step the vital powers decay.

Before the softening of the tubercles takes place, the air cells, from compression, must inevitably have less capacity for atmospheric air; and if it be admitted that this deficiency is made up by a distension of the healthy air cells, still this source is exhausted as the tubercles soften and extend themselves; whereby through the medium of the lungs the system is supplied with a smaller amount of oxygen. According to Liebig, carbon should accumulate, and from an insufficient supply of oxygen to consume it, a fall in temperature should naturally ensue. This, however, is not the case; for it is known that consumptive patients have often an excellent appetite, and, therefore, consume an amount of carbon equal to that when in a state of perfect health, though from the destruction of large portions of the lungs, the capacity for oxygen is diminished. Even let it be supposed that the superfluous carbon is removed by the skin in the form of carbonic acid gas, how is it that the temperature of consumptive patients is quite equal to that of healthy persons who are warmed by a greater amount of heat, owing to a larger quantity of oxygen contained in the lungs?

CHAPTER V.

DIAGNOSIS OF PULMONARY CONSUMPTION.

A few words on the physical state of the chest and throat whilst in a healthy condition, and I shall then enter on the subject of *diagnosis*. Much of the obscurity in which pulmonary consumption was involved has been of late years removed, and emaciation, hectic fever, cough, and expectoration, are no longer regarded as peculiar to this disease.

Auscultation has led the way to a more correct *diagnosis*, and there is reason to hope that by means of the microscope consumption will ere long be recognised with great accuracy, and at an earlier period than hitherto.

If the sound of the voice is not audible to the ear applied to the stethoscope when placed over the anterior superior walls of the chest an inch or two from either side of the sternum, but to that which is free, it is the type of healthy vocal resonance; and if heard at the distal end of the instrument when over the upper inter-scapular and superior sternal regions, it is *bronchophony*. But if the voice apparently speaks

into the ear of the auscultator when the throat is examined over the trachea in the same way, it is *pectoriloquy*, or as it is sometimes called, from its being produced in the trachea, natural *tracheophony*; the respiratory sound heard here, being called tubular. Over those regions where *bronchophony* is elicited, natural bronchial respiration is heard, which is a harsher sound than the true vesicular respiration or murmur, and the terminations of inspiration and the commencement of expiration are better marked. The respiratory or as it is sometimes called pulmonary or vesicular murmur has the greatest intensity over the anterior and upper part of the chest, and the axillary and sub-scapular regions.

Percussion applied to the walls of the chest yields a more or less distinct clear sound, which is more apparent in some regions than in others, considerable tact being required to discover it. If percussion is applied with too much force over the right anterior inferior region, a dull sound is produced owing to the liver being situated below; on the contrary, it is clear owing to a thin stratum of lung overlapping the diaphragm and liver. The same observation will apply to the lung which rests on a portion of the pericardium. If in the upper anterior, axillary, and sub-scapular regions greater force is used, the sonoriety is proportionably increased. These are the usual sounds derived from the chest and throat in a healthy state.

As regards diagnosis, the diseases commonly mistaken for pulmonary consumption are *Pleurisy*, *Pulmonary Abscess*, *Cancer* and *Sphacelus* of the lungs, *Dilatation of the Bronchi*, and *Pulmonary Catarrh*, but if the symptoms of pulmonary consumption are steadily borne in mind, the differential *diagnosis* will be made with little difficulty.

Pleurisy, when ushered in by severe lancinating pains in the chest, cough, difficulty of breathing, and general febrile excitement, is readily distinguished from pulmonary consumption, but sometimes affords no sign of its existence, sufficient to induce the sufferer to apply for relief, until some other disease ensues, or such constitutional derangement develops itself, identical with those signs of consumption, as emaciation, cough, difficulty of breathing, purulent expectoration, hectic fever, palpitation, dulness of sound over the diseased surface, the respiratory murmur being feeble, harsh, and bronchial, with an augmentation of heart sounds. In such a case it is evident that inflammation of the pleura, effusion of pus, and probably those adhesions of the lungs which diminish their capacity, as well as perforations, had escaped notice; otherwise the conclusion would not be drawn that the patient is suffering from pulmonary consumption. Should, however, a careful exploration of the other side of the chest determine its healthy character, it may be concluded that the disease is pleurisy, because that affection rarely or ever

attacks both sides of the chest in the same individual. But if pulmonary consumption is marked, by the catalogue of symptoms enumerated, on one side of the chest, most assuredly the disease will be found more or less developed on the other.

Pulmonary Abscess, as far as the signs of auscultation and percussion extend, is identical with pulmonary consumption, but the situation of the cavern is either in the middle or lower lobe; and it may be farther characterised by its following an attack of inflammation of the lungs, and by the shortness of its course.

Cancer rarely exists in both lungs, which affords a distinguishing character, and *Sphacelus* is easily recognised by the fetor it imparts to the breath and expectoration.

Dilatation of the Bronchi is made out with more difficulty, therefore requires very careful investigation. The emaciation is not so great as in pulmonary consumption; the cough, difficulty of breathing, and hectic fever are more or less severe; a dull sound is produced over the seat of the disease, which is generally in the middle lobes; the respiratory murmur is comparatively feeble, harsh, bronchial, and cavernous; the *rdles* are sibilant, sonorous, *sub-crepétant* and cavernous, with *bronchophony* and *pectoriloquy*. After having watched the disease for some time, it is possible to determine its character, from the less rapid progress

it makes than is found to be the case in pulmonary consumption after the formation of caverns.

Pulmonary Catarrh in its acute form is common to all parts of the lungs, and when any considerable portion is involved the cough and difficulty of breathing is very severe, accompanied with a frothy mucous expectoration. There is much fever, and the respirations, which ordinarily range from eighteen to twenty four per minute, reach thirty and forty and occasionally as high as sixty. Percussion ordinarily yields natural sounds, the respiratory murmur is often obscure and replaced by a wheezing,—a compound of sibilant, sonorous, and *sub-crepitant râles*, which the French call the “tempest sound.” Pulmonary catarrh in its chronic form, or as it is called winter cough, is an affection mostly confined to advanced life, and attacks the most dependent part of the lungs, being rarely met with in the middle or upper lobes. The general symptoms are much less severe than those which accompany the acute form, but the sounds, the result of percussion and auscultation, are similar.

In determining the existence of pulmonary consumption in its first stage, it must be remembered that there is dulness on percussion to a greater or lesser extent over the superior portion of the chest, its most frequent seat being found over the left sub-clavicular and left scapular regions, where the respiratory murmur, during inspiration, is of a dry, vesicular, bronchial character,

harsh, loud, and deficient in intensity, or feeble, and in parts inaudible. In some other portion of the lungs, often that of the opposite side, the respiratory murmur is augmented in intensity, and called puerile, because it resembles the respiratory murmur of children. It is frequently loud during expiration, which is considerably prolonged. A dry crackling sound is often heard at this stage of the disease, and where the dulness is complete *bronchophony*, bronchial respiration, and bronchial cough are always present. In consequence of the increased density of the upper lobes of the lungs from the deposition of tubercles, the sounds of the heart become more audible, and with these physical signs there is cough, expectoration, emaciation, and commonly hectic fever.

At the second stage of the disease, when the softening of the tubercles has taken place, dulness of sound on percussion is more or less complete throughout the superior portion of the chest; the respiratory murmur, where it can be heard, is feeble and harsh, and is replaced in parts by the dry and humid crackling and clicking *rdles*, as well as the *sub-crepetant* and diffused blowing sound. When the tuberculous matter is freely dislodged, and the expectoration contains detached pieces of solid tubercle entangled in the mucous of the bronchial tubes, imperfect *pectoriloquy* commonly exists.

At the third and last stage of the disease, the depression in the walls of the chest become very evident;

they are irregular in form and situation, according to the extent and situation of the mischief below, and usually occupy the upper part of the chest, which tends more or less to produce deformity. Dulness of sound on percussion still exists, unless a large cavern is situated beneath, in which case a metallic sound is produced; gurgling, and humid crackling, and clicking *râles* are then common, with *bronchophony* and *pectoriloquy*, and the respiratory murmur becomes tubular and cavernous. The presence of metallic tinkling is not so frequent as the early writers on auscultation believed; and the absence of *pectoriloquy* is by no means a proof that excavations of the lungs do not exist. Unless caverns of a considerable magnitude are formed on or about the surface of the lungs, and tolerably free from secretion, they will not afford this special character. For if small, or of an irregular form, with bands running across, and numerous bronchi opening into them; or if they hold a more central situation, and are more or less surrounded with healthy lung, *pectoriloquy* will not be found to exist; and the morbid condition is then indicated by the gurgling *râle* and other symptoms.

CHAPTER VI.

TREATMENT OF PULMONARY CONSUMPTION.

IT is necessary for the establishment of a healthy and vigorous constitution, that the human germ should be perfect not only in form but in structure, and that the new being should live in accordance with certain laws, in order to preserve that harmony in its complex organization by which it can alone be preserved. For example, if there is had recourse to more or less food than is necessary for the animal economy, or that which is taken be imperfectly masticated or digested, if the hours appointed for meals are irregular or unnatural, or the food be inferior in quality, the chyle is deteriorated, and the blood becomes unfit to support the different organs in the just performance of their natural functions. When a healthy person overtasks the muscular system by violent or long continued exercise, and some organic disease of the heart or aneurismal affection of the arteries does not ensue, the vital actions are depressed and the constitution enervated, and thus the way is often paved for fatal disease.

If for the full enjoyment of perfect health, even in

one uncontaminated with disease, pure air be essential, so that the least possible vitiated state of the blood may arise, how much the more so must it be for the consumptive individual whose lungs are more or less disorganised, and thus a smaller amount of surface in the form of air cells is afforded for the necessary change. That most important fluid of the body, the blood, requires constant purification, by means of absorption of the oxygen of the atmosphere and the discharge of carbonic acid gas, which is poisonous if too long retained. But(6) this important change cannot take place, if the air, which the patient breathes, is deficient in oxygen, and holds carbonic acid gas and other noxious matters in excess ; and as a consequence, if blood of a depraved quality issues from the lungs, increased, diminished, or perverted actions are sooner or later the result, which re-act upon the disease and tend to destroy life.(7)

The function of the skin performs a much more important part in the animal economy than is generally believed, although the interchange between the kidneys and the skin has met with great attention. It is, in fact, an additional outlet or safety valve for the escape of various matters when the secretions have sustained a check. Cold applied to the surface of

(6) Cyclopædia of Practical Medicine, part XII, p. 312.

(7) Johnson on Derangement of the Liver, &c.

the body contracts its vessels, relaxation takes place in the capillaries of the mucous membranes or elsewhere, and gives rise to discharges either in the form of diarrhæa or that arising from common cold. It(8) has been observed, that persons who entirely neglect the ordinary modes of cleanliness frequently suffer from diarrhæa, and the most obstinate cases have been cured by sponging the body with water every twenty four hours, and making at the same time good use of the flesh brush. Abernethy, and more recently Campbell,(9) have proved by experiment, that the skin absorbs oxygen and throws off carbonic acid gas and water, a function similar to that performed by the lungs, with which knowledge it is our imperative duty to inculcate cleanliness, so desirable at all times, but much more so with a consumptive patient, in order that the diseased lungs may be relieved of a portion of their labour, by augmenting the powers of the skin. For, if the warm bath, tepid sponging and the use of the flesh brush are brought into frequent requisition, much dry scurf and other matter, which obstruct free absorption and exhalation, will be removed from the surface of the body.

I have already stated that violent and long con-

(8) The principles of Physiology applied to the Preservation of Health, &c., by Andrew Combe, M.D., 1836, p. 96.

(9) Observations on Tuberculous Consumption, &c., by J. S. Campbell, M.D., 1842.

tinued exercise is injurious; but if it be taken in moderation it is highly beneficial and even essential to the development of the muscular system and the body in general, and highly valuable in pulmonary consumption. Smart walking and running, singing, and loud and long talking increase respiration and induce congestion of the lungs, and are therefore to be avoided by the consumptive patient. In the early stage of the disease, horse exercise and sailing are among the most useful; in the latter stages, boating when practicable with swinging and carriage exercise may be had recourse to.(10)

From the important office the skin holds in the animal economy, the mode of clothing is a subject for serious consideration, as there is often a tendency to chilliness in the early stage of pulmonary consumption; therefore, those articles which are well known to be bad conductors of heat will be found highly valuable where the constitutional powers are unable to preserve the heat of the body. At the same time the dress must not be so warm as to produce relaxation and enervate the body, especially with females whose chests should be carefully covered and the stays so applied to the body or so laced that they do not in any way impede free respiration.(11)

(10) Johnson on Derangements of the Liver, p. 96.

(11) Thackrah on Employments as affecting Health and Longevity, p. 95.

A generous and judicious diet, with a due consideration to the enfeebled action of the stomach in order to uphold the system against the depressing and debilitating influence of tubercular consumption, is of paramount importance, for it is my opinion that dyspepsia is consequent upon, and not as is generally supposed antecedent to this disease. Its mode of action I conceive is by generating through the medium of a deficiently oxygenated blood a feeble gastric juice, which is incapable of accomplishing the function of digestion in a healthy manner. Now unless this dyspepsia is checked in time, that affection ensues which has been named by Sir James Clark, (12) tubercular cachexy, but which I believe, like dyspepsia, is the consequence and not the cause of pulmonary consumption.

A sheltered situation should be selected, the centre of large towns and cities and north and north eastern aspects must be avoided; there are an abundance of such spots to be found in different parts of England, but few offer more advantages to the consumptive person than Hastings, Sidmouth and Clifton; and where it is considered desirable to select a milder and less variable climate, none surpass those of Madeira, Malta, and Villa Franca. The baneful and cruel system of sending consumptive patients to a foreign country,

(12) The Influence of Climate, &c., by Sir James Clark, M.D.

far away from those friends who can alone offer them consolation in their last moments, with the certain knowledge that they will never return, merely in regard to custom, or to get rid of a tedious but lost ease, cannot be too severely censured. If change of air will at any time arrest the disease, it will assuredly be in its earliest stage, and not at that period when the physician has exhausted his skill in vain attempts to relieve the sufferer, whose lungs have undergone that extensive disorganisation which renders his life hopeless.

The habitation should have a southern aspect, the apartments should be lofty, of a capacious size, and freely ventilated, especially that used for a sleeping room, which should be warmed by a fire or other means during the autumn, winter, and spring, so that no risk of being chilled on retiring to bed, or in rising in the morning, may be incurred. The bed should comprise a soft mattrass, resting on a feather bed, and be well exposed to the air during the day. The hours of rest should always exceed those usually taken by persons in health.

First.—Great attention should be paid to cleanliness of the skin and under clothing, and in the early stage of the disease a warm bath is admissable. Cold sponging with weak vinegar and water or water alone in summer, and tepid during autumn, winter, and spring, should be steadily pursued every morning, and

dry rubbing with a coarse towel, and the brisk application of the flesh brush had recourse to.

Second.—The clothing should be of a description and quantity sufficient to keep the surface of the body completely warm; flannel should be worn next the skin, and the legs covered with woollen stockings, unless the patient is inhabiting a climate where the temperature is high and less changeable than that of England. The linen and flannel worn next the skin should be frequently changed, and that part of the dress, which is not of a washing kind, should often be placed before a good fire, in order to dissipate any noxious matter imbibed from the body. In females, the chest should be well covered, and the stays loose, which should be especially attended to by those who have the care of young persons, as prolonged expiration gives an appearance of freedom to the chest, which it is found not to possess when inspiration is performed. The use of water proof clothing is highly objectionable, as it prevents the escape of matter exhaled from the skin, and thereby involves the lungs in unnecessary labour.

Third.—Pure and mild air is essential in all stages of pulmonary consumption, and should not be too damp, or the transition from warm to cold too rapid.

Fourth.—Every effort should be made to invigorate the body, which must chiefly be effected by diet, and the other means suggested. The breakfast hour should be nine o'clock, and consist of milk, tea, coffee,

chocolate, or cocoa, according to the taste of the patient, with a little cold fowl, game, mutton or lamb, dry toast, or bread and butter, the bread being at least a day old. The dinner should be taken at two o'clock, and should consist of mutton, lamb, beef, if tender, poultry or game, with stale bread and a pudding, composed either of rice, sago, tapioca, or any other farinaceous substance. Fish, salted provisions and pastry should be avoided, and the only vegetable admissible is a mealy potatoe. With regard to fluids, a little light beer, or a glass of sherry should be taken. Half past six or seven o'clock is the best hour for tea; black tea should be used, with dry toast, or bread and butter, and half an hour before retiring to bed, which should not be later than ten o'clock, a cup of arrow-root made with milk should be taken as a light supper. If after breakfast exercise has been taken in the open air, a small portion of Abernethy biscuit and a wine glass of sherry may be taken with advantage by way of luncheon, provided it does not augment the cough or produce flushing; but if the exercise be confined to the house, half the quantity of sherry should be taken mixed with a little water.

Fifth.—The state of the brain and the nervous system require careful attention; cheerfulness of mind and calmness of the nervous organisation are indispensable to health, consequently it is a duty to guard against all causes that are likely to produce undue

excitement on the one hand, or to lead to depression on the other.

Thus far regarding the treatment of pulmonary consumption there is little but what has been adopted by some one or other practitioner, although in its connected form it may have some claim to originality; but that which I have now to describe is altogether new, and forms that part of the treatment which may strictly be termed medical. The reasons which induced me to deviate from that line of medical practice, which has so universally and for so long a time been in vogue, for that which I now submit to the profession, was the fatal termination of all cases whatever was the treatment adopted during an experience of upwards of twenty years. I was led to the conclusion, from a careful survey of the chemical analysis of tubercle made by Thenard,(13) and the only analysis of this morbid product in a crude state that I am aware has been made, that it was defective; in as much as the composition of the animal matter, which it will be observed amounted to upwards of ninety eight parts out of a hundred, had not been investigated. From the greasy nature of tubercle in its crude state, there

(13) Animal matter	98.15
Muriate of soda	} . . 1.85
Phosphate of lime	
Carbonate of lime	
Oxide of iron, a trace of	

did not exist the slightest doubt in my mind that carbon entered largely into its formation, and that its composition had a striking resemblance to fatty matter. This opinion has been strengthened by the discovery of those spherical globules which I have described in the chapter on the "Pathological condition of Pulmonary Consumption." Further investigation may prove that the last change effected in tubercles, before being expelled from the lungs, is a return to that normal structure from whence they derived their existence, which will not only be a curious but highly interesting fact. It may be readily conceived that the morbid action which had for its end the formation and maintenance of tubercles in the lungs would, in a great measure, lose its influence over them, when they become softened and more or less separated from the living tissues, with which they were formerly in close connexion. For among the changes in the earlier stages of pulmonary consumption none is more remarkable than the disappearance of fat, and as the disease advances all the tissues of the body become more or less attenuated, the muscles of involuntary motion excepted, which it is alleged do not obey this destructive process. There is, however, a want of facts relative to this point to thoroughly decide the question. In consequence of the loss of fat, I determined to employ those compound agents rich in carbon and hydrogen, which had not been previously used in

medicine; not with the idea that they would make up the deficiency which the system had sustained in the progress of the disease, but that such a change would by that means be introduced into the constitution as would act upon the forces of the organism at the point of departure from health, whether that took place in the stomach, blood, or elsewhere;—that change tending to such an affinity in the elements within the body, that the carbon, hydrogen, oxygen and nitrogen, instead of assisting in the formation of products which threaten life, would tend to develop those materials only which are required for the perpetuation of health, and the prolongation of existence.

Naphtha, from its chemical composition and unknown properties as a remedial agent, appeared to me the most likely to stop the ruthless progress of destruction, which pulmonary consumption has affected and is still affecting on man. The correctness of my judgment will be tested by an examination of the cases, which were conducted under every disadvantage. That well regulated system of exercise, clothing, cleanliness, air and diet, which has been laid down, was within reach of but few, owing to the rank of life in which the patients walked. From want of employment, it was impossible to procure change of air or even a well ventilated apartment, the room that was usually inhabited being small, low, and common to a large family, wherein all the necessary occupations of domestic

life were conducted. Frequently the sufferer not only dragged on a miserable existence under these circumstances, but had all the drudgery of her household to perform, instead of being exempt, as she should have been, from bodily fatigue. The duties of a wife and a mother, thus placed, were too urgent to be laid aside; and in consequence that necessary attention to cleanliness, which her condition so imperatively demanded, was wholly neglected. Additionally, the clothing of the poorer people was too frequently insufficient to preserve the warmth of the body from the effects of the weather during the cold season of the year, and that part of the dress which should undergo frequent purification by washing was worn much longer than health or decency warranted. The diet was also generally scanty, and deficient in the proper kind of nourishment.

Naphtha was a term first applied to a natural exudation from the earth, and is said to possess different characters, according to the particular part of the globe where it is found. In some parts it has a yellowish white colour, and is highly volatile and combustible; and in others it is of a viscid consistence, and nearly black. The latter naphtha is well known in the commercial world, and is designated Barbadoes tar, the term being due to the island in the West Indies bearing that name, where it is found in great abundance. Although in nature the Barbadoes tar differs in charac-

ter, by the process of distillation it assumes the same appearance as the other natural production, and both are hydro-carbons.

Of late several products, the result of the advanced state of the arts, have received the name of naphtha, although the only characters which they have in common, to entitle them to that appellation, is that of volatility and inflammability. These naphthas are known in the market as the naphtha of coal tar, pyroxylic spirit(14) and pyro-acetic spirit.(15)

Coal tar is the result of the manufacture of gas, and very closely resembles the Barbadoes tar, for which it has been frequently substituted.

Pyroxylic spirit is generated in the process for obtaining acetic acid from wood, and has an alcoholic character; and if not quite pure is somewhat oily.

Pyro-acetic spirit is obtained by the destructive distillation of an acetate generally of lead or lime, and in its outward form is scarcely distinguished from pyroxylic spirit. Its chemical properties are, however, more spiritous, its density being nearly equal to that of alcohol; and it is said to be a mere hydro-carbon, while the former contains oxygen.

The distilled products of those naphthas which exude from the ground and coal tar are immiscible in water;

(14) Pyroligneous ether and hydrate of oxide of methule, are also synonyms for this kind of naphtha.

(15) Mesityc alcohol or acetone are synonymous with naphtha.

while pure pyroxylic and pyro-acetic spirit will unite in all proportions without the transparency being disturbed. The pyroxylic spirit, however, in the state in which it is generally found in commerce becomes milky on being mixed with water, owing to the oily matter it contains.

It was my good fortune to commence my experiments with that kind of naphtha called pyro-acetic spirit, being quite unaware, at the time, that there was more than one kind, and the knowledge that I had been in this particular the "mere sport of circumstances," grew out of an occasional change in the druggist, and the favourable or unfavourable symptoms which followed the one or other supply. By experiment, I soon formed a criterion by which I could identify the kind of naphtha I had found to be successful. My test was its colourless and transparent character, and agreeable ethereal alcoholic odour; its specific gravity, which was 0.823 to 0.824; its increase of temperature consequent upon mixture with water; its preservation of appearance on the addition of nitric acid; and its taste being warm, without the least sensation of burning. "Dr. Ure has recently suggested an easy method of effecting this object, which is founded on the following facts. If nitric acid of specific gravity 1.45, be added to pyroxylic spirit the mixture assumes a red colour, but no effervescence takes place. If the same acid be added to pyro-acetic spirit, there will be no change

of colour, but an effervescence will slowly be formed, accompanied with an elevation of temperature, and copious evolution of gas, resembling in appearance the action resulting from the mixture of alcohol with nitric acid, but with an acetic smell, instead of an etherious one. Pyro-acetic spirit may also be generally distinguished from pyroxylic spirit by its causing no appearance of milkiness on mixing with water, in the state in which it is met with in commerce.”(16)

The tests here submitted will be amply sufficient to distinguish the naphtha best suited to pulmonary consumption, and the question as to its true composition, which will more or less effect the nomenclature, is only important as a scientific problem. The settlement of these points I must leave to the practical chemist, and although it appears that the remedy I employ is pyro-acetic spirit, I do not feel myself justified, at present, in calling it by any other name than that of naphtha.

Innumerable were the experiments, and perplexing beyond conception, except to those who have been themselves investigators, were the results of my practice, until I discovered the naphtha best suited to my purpose. This mode of treating consumption has appeared in the *Lancet*,(17) since which this remedy has been made use of extensively by medical men, who, not being aware

(16) *Pharmaceutical Journal*, vol. III, p. 35.

(17) No. 5, vol. II, for April 29, 1843.

of these differences, became alarmed at the symptoms which supervened upon its use; such as a burning sensation in the throat, nausea and in some instances sickness, head-ache, palpitation and fainting, and at once abandoned it. It is evidently then a matter of the highest importance that the quality of the naphtha which is employed be well examined, in order to avoid the distressing symptoms which have been mentioned.

I administer naphtha three times a day, in doses of fifteen drops for an adult mixed with a table spoonful of water, which is proportionably decreased according as the patient approaches youth. After the second or third day, I increase the dose by about one fourth; regulating its increase or decrease, according to the absence or presence of nausea, sickness, or any other untoward symptom arising out of its use. As the disease advances, I increase the dose to forty and even fifty drops, and administer it four times a day instead of three times.

The successful use of naphtha, as an internal remedy, induced me to try its effects by inhalation, to which I was the more inclined from the results of the following experiments:—

1st.—A little naphtha having been put into a bent tube, resembling the capital **U**, some expectorated matter was poured upon it, which had been determined with the microscope to be rich in globules of tubercle.

Gentle heat was then applied and the naphtha driven off, when the super-imposed secretion presented a mere shapeless mass of animal matter, the globules having entirely disappeared.

2nd.—Some tuberculous secretion highly charged with globules of tubercle was placed under the field of the microscope, and a drop of naphtha added, when an immediate disappearance of the globules ensued, leaving behind a mass of the same character as on the former case. The frequent repetition of this experiment, invariably led to the same result.

3rd.—Some tuberculous secretion of the lungs was put into a portion of the intestine of a child, and placed over a wide mouthed bottle which contained a small quantity of naphtha, between which and the intestine a clear space of three inches remained. A spirit lamp was then placed under the bottle, and a very gentle heat applied until slight ebullition took place, which was continued for an hour. The contents, when removed from the intestine and examined with the microscope, presented the same appearance as described in the previous experiments.

Considerable benefit resulted from the inhalation of naphtha, in lessening the difficulty of breathing in the most advanced cases, in rendering muscular efforts less painful and fatiguing, and in a general alleviation of all those symptoms which distress the consumptive patient. The expectoration is not unfrequently rather

increased immediately after the inhalation of naphtha, but the cough has changed for one of a milder character. Improvement was generally observed to follow that kind of inhalation which was performed with little exertion. It may be employed several times in the day, unless it produces nausea and sickness, when its use should be suspended ; and on its being resumed, in such cases, it should be applied for a shorter period. When there is spitting of blood, its use is not admissible.

CHAPTER VII.

CASES OF PULMONARY CONSUMPTION.

FIRST CASE.

CHARLES Taylor, a single man, aged eighteen, residing at 14, Wells Street, Oxford Street. Shortly after his birth he was deprived of his mother's care, who fell a victim to consumption, since which time he has lost a brother from the same disease. At the period of his presenting himself to the Dispensary, on the thirteenth of October, 1842, he was following the trade of a copper-plate printer. For several years previous to his application for relief, he had suffered from cough and difficulty of breathing, for which he had frequently sought medical advice, and of late had considerably wasted in flesh. His general appearance was unhealthy, his frame weak, his complexion dingy, his circulation a little accelerated, his cough was attended with considerable expectoration, and difficulty of breathing was experienced in all attempts at muscular exertion, especially on going up stairs. The appetite was tolerably good, and the bowels regular; the movements of the superior portion of the chest were confined,

particularly on the right side, where the sound from percussion was very dull, and the respiratory murmur in places absent. Percussion applied to the left side anteriorly and superiorly yielded a better sound than when over the same space of the opposite side. The respiratory murmur was rough and inspiration performed with jerks, and in both sub-clavicular regions the sounds of the heart were very distinct. The treatment adopted up to the third of December comprised hydrocyanic acid and preparations of iodine, without any appreciable benefit. Ten drops of naphtha in a table-spoonful of water were then administered three times a day. At the expiration of a month a decided improvement was evident, both on percussion and auscultation, and the dose of naphtha was doubled. A week afterwards, the inspiration was no longer performed with jerks; relaxation of the bowels had occurred on the previous day, but was attributed to his having eaten pork, which had often before affected him in the same way. Up to the nineteenth of January, the only unfavourable symptom which occurred was that of soreness of the throat, which lasted for two days; while the cough and expectoration had diminished, the sound on percussion had become clearer, and the respiratory murmur improved. This state of things continued until the eleventh of February, when it was quite apparent he had gained strength. In addition to the internal use of naphtha, the inhalation of that

agent was now put in practice, which proved beneficial, for in a few days there was very little cough, expectoration, and difficulty of breathing, and the results of percussion and auscultation were more satisfactory. On the ninth of April, up to which time I take my leave of the case for the present, the cough and difficulty of breathing had entirely disappeared, and he had gained both flesh and strength; and although there was still slight expectoration, the sounds of the chest were almost natural.

SECOND CASE.

Ann Simmons, a single woman, aged twenty-four, residing at 6, Titchfield Street, Soho, who had lost father, mother, and one brother from consumption, was admitted under my care on the twenty-ninth of January, 1843. For the last three or four winters she had suffered from cough, and repeated attacks of inflammation of the bowels, during the same time. Her cough had been very severe for the last three or four weeks, and great emaciation had taken place; her pulse was eighty and weak, appetite and bowels irregular, and pain was experienced after meals at the pit of the stomach. Percussion yielded a duller sound over the right anterior superior region, than over the left; the respiratory murmur over the right clavicular region was nearly inaudible, and when

distinguished, it was both feeble and harsh. Over the same region, on the other side, it was puerile. The sounds of the heart were much more distinct over the right clavicular region, than over the left. Twenty drops of naphtha were ordered to be taken, in a tablespoonful of water, three times a day. Eighteen days afterwards, considerable amendment was evident, and in addition to the internal use of naphtha it was directed to be inhaled three times a day. On the fiftieth day, the cough was diminished, and the appetite good. Percussion yielded a good sound on the right side, and the respiratory murmur had become distinct, whilst its puerile character, on the other side, was less. The bowels, however, were confined, and towards night the legs swelled. She had been residing with a brother at Croydon during the last fortnight, as the one in town she had been living with could no longer render her support. To correct the state of the bowels, some aperient pills were administered. On the sixtieth day, the cough and expectoration had almost disappeared; the palpitation was sometimes troublesome, but she had gained both flesh and strength, and natural sounds were the result of percussion and auscultation. For the purpose of relieving the palpitation, she was directed to take two grains of the hydriodate of potash with each dose of the naphtha. On the sixth of May, being the hundredth day of her placing herself under my care, she had

neither cough, expectoration, or difficulty of breathing and considering herself well, ceased to visit me.

THIRD CASE.

Eliza Dunn, a married woman, aged twenty-seven, residing at 14, James Street, Camden Town, had lost two of her sisters from consumption, and was admitted under my care the second of March, 1843. She had two children living, was now pregnant, and had been subject to frequent miscarriage. During the winters of the last nine years, she had been attacked with cough, and had found that it increased during pregnancy. Cough, expectoration, and difficulty of breathing were severe, and though her general health was good, she had wasted considerably in flesh, which was the more immediate cause of her seeking medical relief. Percussion elicited rather a dull sound over both clavicular regions, where the respiratory murmur was harsh. After taking fifteen drops of naphtha, three times a day, for seven days, she was very much better; for the cough and expectoration had subsided, and the respiratory murmur had improved, and percussion yielded a dull sound only at the external end of the left clavicle. On the thirtieth of March, being the twenty-eighth day of her using the naphtha, she was quite well, and the signs from percussion and auscultation were natural.

FOURTH CASE.

Maria English, aged nineteen, a married woman without family, residing at 22, Pitt Street, Tottenham-court-road; was placed under my care the eighteenth of November, 1842, for a neuralgie affection of the face. After relief from this disease, she stated that for the last three years she had suffered at intervals from cough, expectoration, and difficulty of breathing, accompanied with palpitations and cold nocturnal perspirations, which had latterly become unusually excessive about the arm pits. As far as she knew, the members of her family were healthy. During the last month, or six weeks, rapid emaciation had ensued. The pulse was now ninety-six, small and weak, the appetite tolerable, the bowels confined, and the *catamenia* irregular. A dull sound was the result of percussion over both sub-clavicular regions, and the respiratory murmur indistinct where the heart-sounds were clearly audible. After the lapse of twenty-one days, from the use of naphtha in fifteen drop doses, three times a day, the cold night perspirations had disappeared, but improvement had not otherwise manifested itself. On the twenty-fifth day the expectoration had diminished, and the respiratory murmur over the right sub-clavicular region had improved. On the thirty-second day the cough and expectoration had evidently become less,

but the palpitation continued, for the purpose of removing which a grain of the hydriodate of potash was added to the naphtha. This had the desired effect, but produced sickness, and an increase of cough and expectoration. A drop of hydrocyanic acid was in consequence added to each dose of the naphtha, and the hydriodate of potash discontinued. On the thirty-ninth day, the sickness had disappeared, and the cough, expectoration, and difficulty of breathing were much better; percussion afforded a clearer sound, and the respiratory murmur was distinct throughout the upper part of the chest, although it possessed a harsh character. On the fifty-first day the cough and expectoration, which had been on the increase for several days, was very harassing, accompanied with severe headache, palpitation and sickness, which proved to be the effect of a week's use of one of the noxious naphthas. A rapid improvement manifested itself on using the right naphtha, which continued until the fifty-sixth day, when owing to an alarm she experienced on the previous day, from two men rushing into her room, and calling fire, the cough and expectoration immediately increased. She had inhaled the fumes of naphtha for the last two days, and thought it had caused a little faintness, which was unusual with her; she invariably breathed with more freedom for some hours after. From this period to the eighty-seventh day, she had much improved; but in consequence of a return of the

palpitation, the hydriodate of potash, combined with the naphtha, was again prescribed. On the ninety-fourth day, she had little or no cough, and on the second of April, being the one hundredth and first day from the commencement of the naphtha treatment, all symptoms connected with the disease in the chest had disappeared, and the only inconvenience of which she complained was debility. An accidental circumstance brought me in contact with this patient on the fifth of June, when to use her own expression she never enjoyed better health in her life.

FIFTH CASE.

Amelia Harris, a married woman of several years standing, without family, aged twenty-nine, residing at 10, Cross Street, Newton Street, Holborn, consulted me on the seventh of March. It appeared that her family were remarkably healthy, but that, about twelve-months ago, she spat blood, which, for the last fortnight, had recurred several times, and to a greater extent. During several winters, she had suffered from cough, which of late had been very troublesome, and accompanied with severe colliquative night perspirations, expectoration, difficulty of breathing on the slightest muscular exertion, and rapid emaciation. The bowels were regular, and the appetite bad; and though the *catamenia* was correct as to time, it was deficient in

quantity. Over the right and left clavicular regions, percussion elicited a dull sound, which was somewhat less in intensity on the right side. The respiratory murmur, on the right side, was harsh, whilst on the left it was almost inaudible. The usual dose of naphtha having been administered, at the expiration of the seventh day the cough, expectoration, and night perspirations had manifestly improved; on the twenty-eighth day, they had entirely subsided: she had gained considerably in flesh. The previously dull sound, and unhealthy respiratory murmur emitted from the chest, had become almost natural, and the heart-sounds could be but faintly heard. In fact, so satisfactory were all the signs of returning health, that she was discharged as cured. The desire of placing under my care a poor consumptive friend, who had watched from day to day with the most intense interest the progress of her cure, called my attention again to her condition on the twenty-fourth of June; her health was then perfectly re-established.

SIXTH CASE.

Ann Davidson, of 12, Upper Rathbone Place, of thirty-five years of age, and married, related the following account of herself, when admitted under my care on the twenty-seventh of December, 1842. Her family were not healthy, her father having died from asthma,

and one brother from consumption. During her *accouchement*, which occurred two months ago, she took cold, and cough and expectoration were the immediate consequences, and cold perspirations, which generally came on during the evening, then followed. Loss of flesh, and an impeded respiration, particularly on ascending a staircase, joined in the train of symptoms; the cough became severe, the pulse rather quick but weak, the tongue white, and there was but little indication of an appetite. The bowels were regular. Below the right clavicle the sound was dull, and the respiratory murmur marked by the dry crackling *râle*; while on the opposite regions, the one was clear, and the other puerile. Naphtha, in a table spoonful of water, as usual, was prescribed in this case. On the fourth day, the cold perspirations ceased, the cough and expectoration diminished, the appetite improved, and the tongue appeared clean. The dose of naphtha was now increased; and on the eleventh day, the cough, expectoration, and difficulty of breathing, were so slight, that she did not require my opinion to convince her of her amendment. The dulness was rapidly disappearing on the right side; and the dry crackling *râle* was no longer to be detected, a harsh respiratory murmur having occupied its place. On the twenty-eighth day, the general improvement had so steadily progressed, that she experienced, but one slight shock, that of a cold perspiration on one occasion. On the thirty-sixth day,

her cough was very slight, and she had entirely lost the expectoration and difficulty of breathing. The appetite was good, the sound was clear, and the respiratory murmur healthy throughout the walls of the chest, except over a small space at the outer end of the right clavicle. From this period until the sixth of April, being the sixty-first day since she first took the naphtha, I had not an opportunity of watching, so closely as I could have wished, the progress of her recovery; for feeling herself well, she had neglected to appear at the Dispensary. Many similar cases of this kind subsequently occurred. She was in very good health, free from cough, expectoration, and difficulty of breathing, and was strong and fleshy.

SEVENTH CASE.

Maria Cuthbert, a single woman, aged eighteen, residing at 15, Foley Street, Foley Place, was admitted under my care on the twelfth of October, 1842. For the last twelvemonths she had suffered from cough and slight expectoration, with considerable difficulty of breathing, and severe nocturnal perspirations, and of late had become much emaciated. About six weeks ago she lost her voice, which she had not regained. The bowels and *catamenia* were irregular, and the appetite uncertain; her spirits were depressed, and her constitutional powers prostrated. It did not appear that any member of her family had been consumptive, or par-

ticularly unhealthy. There was dulness of sound over the superior part of the chest, both anteriorly and posteriorly. The respiratory murmur over the right clavicular region was feeble and harsh, and it had the same character, but in a lesser degree, over the left. The sounds of the heart were very distinctly heard over the right clavicular region. She was subjected, without the least sign of amendment, to a variety of treatment, which comprised counter-irritation, expectorants, absorbents, and aperients. On the third of December, she commenced taking the naphtha, in ten-drop doses; but the only amelioration, at the end of the forty-second day, that she experienced, was the recovery of her voice, while she complained of pain in various parts of the chest and head. The naphtha was now increased in dose. On the fifty-second day, the cough gradually abated. On the sixty-fourth day, however, the cough and expectoration had increased, and she had again lost her voice. The full dose of naphtha, namely twenty drops, was then administered, and the symptoms, in a few days, changed for the better; and at the end of a week, cough and expectoration had ceased, and the voice was restored. On the first of June, being the one hundred and seventy-first day since the treatment with naphtha commenced, she had neither cough, expectoration, or difficulty of breathing. Percussion yielded a natural sound throughout the walls of the chest, and the respiratory murmur was of a healthy character.

EIGHTH CASE.

Sarah Smith, a single woman, aged twenty-two, residing at 14, Lass Place, Bloomsbury, was admitted under my care on the twenty-eighth of February, 1843. She was not aware that any consumptive taint existed in her family. She had always enjoyed good health until last summer, when she was seized with a severe attack of indigestion. This was shortly followed by cough, expectoration, and difficulty of breathing, which had not yet left her. For the last two months she had been harassed with nocturnal perspirations, and had recently lost much flesh. Her appetite was bad, bowels irregular, and *catamenia* scanty, and she had *leucorrhœa* in addition to her other complaint. The chest was well-developed, but depressions below the left clavicle existed. A dull sound was apparent over the whole superior portion of the chest, and over the left clavicular regions; the respiratory murmur was in parts inaudible, as well as being feeble and harsh on both sides. The sounds of the heart were very loud over the same spaces. Ten drops of naphtha, in a table spoonful of water, was ordered to be taken three times a day. At the end of twenty-one days, the cough, expectoration, and difficulty of breathing, was very much improved: the dose of the drops was doubled. On the forty-second day, the cough and expectoration had entirely disappeared, respiration was very slightly impeded on going up stairs,

the appetite was natural, but pain was experienced after meals, accompanied with a sensation of fulness about the throat and stomach. The *leucorrhœa* had increased, and a solution of nitrate of silver, a grain to the ounce, was used every night in relief as an injection, and some tartar emetic ointment rubbed into the pit of the stomach, three times a day, until pustulous eruption should appear. On May the fourth, the sixty-first day from the commencement of the naphtha treatment, she had neither cough nor any other symptom characteristic of disease of the chest; the pain after taking food, and the *leucorrhœa*, had disappeared, and she was rapidly gaining strength. A good sound was elicited by percussion, and the respiratory murmur was heard with rather less intensity than natural throughout the superior part of the chest. The state of her health was such, that it was no longer necessary to keep her as a patient. On the seventeenth of June, I met by accident this young woman, carrying a heavy child in her arms; she looked remarkably well, and declared she had never been better at any previous period of her life.

NINTH CASE.

Ellen Webb, a married woman, aged twenty-eight, residing at 4, Exmouth Street, Hampstead Road, of a healthy family, was admitted under my care on the eighteenth of February, 1843. She had enjoyed good

health until about six years ago, when she was frightened by an alarm bell, the shock being so great, that it deprived her of reason for three months, and her ultimate recovery was very gradual. She had just weaned her child, after twenty-one months' nursing, during the last three months of which the *catamenia* was regular. Lately she had lost much flesh, and become very weak. For the last fortnight she had suffered from cough and difficulty of breathing, with cold nocturnal perspirations, and wandering pain in various parts of the chest, accompanied with palpitation, fainting and flatulence. The bowels regular, and the appetite pretty good. Her eyes and hair were dark brown, and her skin sallow. Her chest was well formed. Percussion yielded a dull sound over all the superior portions of the chest, more particularly over a small space below the centre of the left clavicle, where the respiratory murmur was scarcely audible, while over other spaces it was feeble and harsh. The heart sounds were very distinct over the right clavicular regions. Fifteen drops of naphtha, in a table spoonful of water, were ordered for her, three times a day. Twelve days afterwards, the cough and difficulty of breathing had diminished, and the nocturnal perspirations had disappeared after the second day of taking the medicine. On the twenty-sixth day, the cough had entirely ceased. Inspiration was performed with jerks over the left clavicular regions, and the cold perspirations had re-appeared. At the end

of the forty-fourth day, her cough and difficulty of breathing had returned, accompanied with violent palpitation, which was attributed to her singing in chapel on the previous Sunday, as up to that instant she had remarkably improved. On the fifty-first day, however, the cough and difficulty of breathing had ceased again, but the palpitation continued, with flatulence and pain after meals. By means of auscultation, there did not appear to be any structural disease of the heart. A better sound generally was the result of percussio, and the respiratory murmur was marked by less harshness. Tartar emetic ointment was ordered to be rubbed over the pit of the stomach, for the purpose of producing counter-irritation, in order to relieve the dyspepsia. On the nintieth day, the only complaint that remained, was that of palpitation, which she stated was invariably brought on by the least excitement. On the eleventh of June, being the one hundred and seventh day of the naphtha treatment, she was quite well. Percussion yielded a natural sound throughout the walls of the chest, and the respiratory murmur was healthy.

TENTH CASE.

Eliza Elliot, a single woman, aged twenty-three years, residing in Cirencester Place, Portland Place; was admitted under my care the twenty-third of March,

1843. Her father and sister were victims to consumption. For several winters she had cough, but the last winter it had been unusually severe, and was now accompanied with considerable expectoration, difficulty of breathing, and palpitation. During the last month she had much wasted. The appetite was tolerable, the bowels regular, and the *catamenia* healthy; she did not suffer from indigestion. Over the right clavicular regions, there was a dull sound, and the respiratory murmur was feeble and harsh. While over the same regions of the opposite side, the one sign was clear and the other puerile. The sounds of the heart were loud over the right side. Twenty drops of naphtha, in a tablespoonful of water, containing two grains of hydriodate of potash, were ordered to be taken three times a day. After a lapse of fourteen days, the cough, difficulty of breathing and palpitation had considerably diminished. As the bowels were confined, two aperient pills were taken occasionally. By the twenty-eighth day the cough, expectoration, and difficulty of breathing had entirely disappeared, and she had gained strength; the respiratory murmur, and the sound from percussion being almost natural.

ELEVENTH CASE.

Thomas Howell, a married man, aged twenty-two years, residing at 16, Foley Street, Foley Place, of a

consumptive family, his father, brother and five other members of his family having died during the last twelve months from pulmonary consumption, and a sister being now confined to her bed from the same cause, consulted me for the first time, on the twenty-fourth of March, 1843. He was following the trade of a shoemaker. About two months ago he caught cold while riding at night outside a coach from Cheltenham to London. This was followed by cough, which ceased in the course of a week; leaving, however, a little shortness of breath. The cough returned a fortnight ago, without any apparent cause, which had daily grown worse, and a rapid loss of flesh and considerable debility was the direct consequence. His general health, which had always been excellent remained unimpaired, and the only other complaint he had to make, was a little dimness of vision which he had suffered from more or less since childhood. The chest was well formed, although its motions were somewhat restricted, and the clavicles were unusually bent outwards. A dull sound was the result of percussion over all the superior regions of the chest, and the respiratory murmur was generally feeble and harsh over the same spaces. The sounds of the heart were very distinct below the right clavicle. After taking naphtha for seven days, the cough had ceased to trouble him, and the sounds of the heart were scarcely audible below the right clavicle. At the end of fourteen

days, he had no complaint to make, and was growing stouter and stronger; percussion yielded a clear sound over the whole of the upper part of the chest, the respiratory murmur was much improved, and the sounds of the heart were inaudible below the clavicle. On the twenty-seventh of April, being the thirtieth day of the naphtha treatment, he enjoyed excellent health. Percussion continued to yield a natural sound, and the respiratory murmur was slightly harsh below the left clavicle.

TWELFTH CASE.

Hannah Clements, a married woman, aged twenty-eight years, residing at 16, Noel Street, Oxford Street, commenced the naphtha treatment on the eighth of February, 1843. She had lost her father from asthma, and a sister was then dying from consumption, her eldest child being at the same time a martyr to serofula, and under my care. She was by trade a waisteoat-maker, had led a very regular life, and had been troubled with cough and expectoration during the last three winters, but had been much worse this winter, than any preceding one; the expectoration was very considerable, and the difficulty of breathing very distressing. For several weeks she had been deluged with nocturnal perspirations, and her loss of flesh and debility were very apparent. The bowels

were sometimes relaxed, and at other times confined; the appetite was very bad, and she suffered from nausea, as soon as she tasted food, the *catamenia* was irregular, and she had *leucorrhœa*. Her eyes and hair were of a dark colour, and the skin had a dirty yellow hue. The walls of the chest were greatly emaciated, with depressions above and below the clavicles. The sound was dull over all the upper parts of the chest. Where the respiratory murmur could be heard it was feeble and harsh, and below the right clavicle it was mostly inaudible, the dry crackling *râle* was there distinct, as well as the sounds of the heart. After taking the naphtha for twenty-one days the cough, expectoration, and difficulty of breathing had considerably diminished, and the nocturnal perspirations had ceased. On the thirty-fifth day, farther improvement had taken place, the sound elicited by percussion was better, the respiratory murmur was distinct over all the anterior, posterior, and superior regions, and the sounds of the heart less audible. Her general health was excellent, her appetite was good, and the comparison with her late condition so marked, that she observed at no period of her life had she partaken of food with such a relish. At the end of the forty-ninth day, owing to a cold she had taken, a slight return of her cough and expectoration took place; but on the seventy-seventh day she had again improved in flesh and strength, her cough, expectoration, and difficulty of breathing

had entirely subsided, and the signs both from percussion and auscultation had returned almost to the healthy standard. On the fifteenth of June, being the one hundred and twenty-seventh day after the commencement of taking the naphtha, she was well, having no complaint of any kind, except slight *leucorrhœa*.

THIRTEENTH CASE.

John Farmar, a single man, thirty-five years of age, and by trade a stone mason, residing at 2, St. James' Place, Hampstead Road, was admitted under my care the twenty-third of January, 1843. At the commencement of last autumn he spat blood, which was followed by cough, expectoration, and difficulty of breathing, and more recently had severe night perspirations with great loss of flesh, which had rendered him unable to follow his employment, although he had previously been very robust; bowels very irregular and the appetite bad. Percussion afforded a dull sound over all the anterior and posterior superior regions of the chest, but was more strongly marked below the right clavicle, where the respiratory murmur was scarcely audible; over the other parts it was feeble and harsh. Fifteen drops of naphtha to commence with was prescribed in this case three times a day. Five days afterwards, he had perspired but once, and the cough and expectoration had greatly diminished,

as well as the difficulty of breathing. At the end of the twenty-sixth day, he had experienced a return of all his former bad symptoms, in consequence of having recommenced his work and given up his medicine, believing himself well. A renewal, however, of the naphtha treatment having been steadily followed for twenty-one days, he had not the least complaint to make of the symptoms for which he sought medical relief, and in consequence, he returned to his usual employment, which, I was ultimately glad to find produced no ill effect.

FOURTEENTH CASE.

Kesiah Narborough, a single woman, aged twenty years, following the occupation of a servant, was admitted under my care the twentieth of April, 1843, her residence being at 11, St. Leonard's Street, Pinlico. The only member of her family, that she was aware of, who had died from consumption was an aunt. About a year back she was attacked with severe pain in the head and left side just below the region of the heart, accompanied with fainting and hysteria and subsequently with cold nocturnal perspirations; a week since she spat blood, respiration being impeded by slight muscular exertion particularly on ascending a staircase, by the presence of a slight hacking cough, and of late by a softening as it were of the flesh. She suffered from severe

pain at the pit of the stomach after taking food, with loss of appetite, which was accompanied with palpitation. The bowels were irregular and she had pain in the head which was always augmented in the evening; *catamenia* appeared for the first time and that but slightly last week, the temperament was leucophlegmatic, the hair light brown, the eyes light blue, and the teeth good. The left side of the chest was better developed than the right, its motions were limited, and below the outer end of the right clavicle there was a considerable depression. Percussion yielded a dull sound over the entire upper part of the chest. The respiratory murmur was generally weak and harsh, and over the right clavicular regions the dry crackling *râle* was present, where the heart sounds were very distinct. Expiration was remarkably prolonged. Fifteen drops of naphtha in a table-spoonful of water was taken three times a-day, but as the medicine had not produced any good effects by the seventh day, the dose was increased to twenty drops and a drop of hydrocyanic acid added to each. On the fourteenth day, five grains of the trisnitrate of bismuth were directed to be taken three times a-day, and two aperient pills occasionally in addition to the drops. On the twenty-first day a general improvement was evident, and on the twenty-eighth day the night perspirations had ceased, the appetite was natural, and food could be taken without pain and palpitation. Her cough and difficulty of breathing had all but disappeared; the sound

on percussion was much improved as well as the respiratory murmur. On the third of June, being the forty-fourth day of the treatment with naphtha, the remedy was abandoned and she pronounced herself in better health than for several years past, and considered that she was able to resume her duties as a servant.

FIFTEENTH CASE.

Eliza Grace, a married woman, aged thirty-four years, residing at 82, East Street, Manchester Square, having lost her father, brother and three sisters from pulmonary consumption, placed herself under my care on the thirteenth of May, 1843. Her health had been generally good, with the exception of slight attacks of indigestion, which she had suffered from for some years. During the last twelvemonths, she had several attacks of cough and hoarseness, but about a month ago the cough was accompanied with expectoration, difficulty of breathing and excessive night perspirations, and a rapid emaciation of the body followed. The *catamenia* and bowels were regular, the appetite tolerable, the hair was light brown, and the eyes light blue. Percussion afforded a dull sound generally over the upper regions of the chest, the respiratory murmur was scarcely audible below the left clavicle where the dry crackling *râle* existed, but it was generally feeble and harsh. Fifteen drops of naphtha in a table spoonful of water three times a-day was pres-

cribed for her, and at the expiration of fourteen days, the cough and expectoration as well as difficulty of breathing had in a great degree given way, the nocturnal perspirations having disappeared after a few doses of the medicine had been taken. In the course of twenty-four days, little remained in the chest to complain of, excepting over the left clavicular regions, where percussion yielded a rather dull sound, and the respiratory murmur was feeble. The appetite was natural, and to use her own expression, "She felt better after every dose of the medicine." On the fifty-second day she was in sound health, and the signs afforded by auscultation and percussion were natural.

SIXTEENTH CASE.

Eliza Shepherd, a married woman, aged forty-one, residing at 39, Carnaby Street, Regent Street, consulted me on the eleventh of May, 1843. Her father and several branches of his family had died through consumption. For some time, she had been troubled with cough and expectoration attended with difficulty of breathing and nocturnal perspirations, and during the last six weeks had greatly fallen away. Her pulse was eighty and weak, her bowels constipated; there was great loss of appetite, and a sensation of pain at the pit of the stomach after meals. The *catamenia* was regular. The walls of the chest were very much

attenuated, there existed considerable depressions in the neighbourhood of both clavicles, and on the left side the movement of expansion was hardly perceptible. There was a dulness of sound over all the upper regions of the chest, and the respiratory murmur was generally feeble and harsh, the sounds of the heart being very distinct on the right side. In order to correct the bowels two aperient pills occasionally at bed time were prescribed, and the naphtha treatment in fifteen drop doses commenced. The night perspirations soon ceased. At the end of seven days the cough and expectoration had diminished, and the appetite had improved, but she complained of pain between her shoulders. The drops were now increased to twenty, and a mustard poultice applied between the shoulders. At the close of the fourteenth day, she had greatly benefitted in every respect and possessed a good appetite. On the twenty-eighth day the cough, expectoration, and difficulty of breathing had entirely left her, and the sounds both from percussion and auscultation were of a healthy character.

SEVENTEENTH CASE.

Eliza Cullum, a single woman, aged eighteen years, who had lost her father from consumption, sought my advice on the twentieth of April, 1843. She had enjoyed very good health, until within the last four

months, when she experienced a sensation of tightness in the abdomen, followed by difficulty of breathing, and nocturnal perspirations. It was not, however, until three weeks ago, that she began to cough, since which time she had rapidly lost flesh. The pulse was a hundred and twenty, and small; and she had palpitation in a severe degree, which was brought on by the slightest emotion; the *catamenia* was healthy, the bowels were irregular, and the appetite bad, and she complained of great languor and debility. The movements of the chest were confined, and percussion elicited a dull sound over all the superior parts of the chest; but was more strikingly marked over the right clavicular regions, where the respiratory murmur was scarcely audible. Over the same regions on the left side, it had a puerile character. The heart sounds were very loud on the right side. Two drachms of naphtha with a drachm and a half of the tincture of digitalis were prescribed as a mixture, to be taken in doses of twenty-five drops in a table-spoonful of water three times a day. At the end of fourteen days she had generally improved, and the pulse was reduced to eighty per minute. The naphtha was now increased to twenty drops, and the digitalis was dispensed with on the twenty-eighth day, which was the period of her next visit. She informed me that the cough and difficulty of breathing had for some time disappeared, and her appetite had from day to day improved, and was then natural. The signs from per-

cussion were greatly improved, and the respiratory murmur had lost in a great degree its puerile character on the left side, and become more distinct and healthy on the right.

EIGHTEENTH CASE.

Elizabeth Swaine, aged twenty-three years, residing in the Commercial Road, Whitechapel, of a decidedly healthy family according to her own account, consulted me on the twenty-first of April, in consequence of her having a cough, difficulty of breathing, and nocturnal perspirations, which made their appearance about two months since. During the last month she had lost flesh rapidly. The bowels were irregular, she had no appetite, and complained of a severe pain at the pit of the stomach after taking food. The *catamenia* was irregular. Percussion yielded a dull sound over the entire upper part of the chest, where the respiratory murmur was generally weak and harsh; but in places inaudible, particularly below the left clavicle. The heart sounds were unnaturally loud over the spaces enumerated, which exhibited considerable depressions. She was ordered a drop of hydrocyanic acid in a little water three times a day, and some tartar emetic ointment to be rubbed into the pit of the stomach three times a day until pustules appeared. In ten days the symptoms of indigestion were removed; in other respects, however, no improve-

ment had been effected. Twenty drops of naphtha were now prescribed to be taken in a table-spoonful of water three times a-day, and inhalation at the same time was had recourse to. After the thirty-first day the cough and difficulty of breathing had almost disappeared, the appetite was natural, and the bowels regular. The sounds of the chest were greatly improved, and also the respiratory murmur. At the expiration of the forty-fifth day from the time of commencing the medicine, she felt very much improved in all respects, and was daily growing stronger.

NINETEENTH CASE.

Margaret Lee, a married woman, aged twenty-seven years, of 47, Stanhope Street, Clare Market, informed me, on her admission as a patient on the fourth of May, 1843, that as far as her knowledge of her family history extended, the only member of her family who had died from consumption was her brother. For the whole of the past winter she had cough, expectoration, difficulty of breathing, and nocturnal perspirations, and for the last month had rapidly wasted and lost strength. The *catamenia* and the bowels were natural, the appetite was deficient, and some pain at the pit of the stomach was experienced after meals, attended with flatulence and palpitation. A dull sound was generally the result of percussion over the superior regions of the chest,

and the respiratory murmur was then feeble and harsh, while below the right clavicle a dry crackling *râle* was distinct. The heart sounds were loud over the right side. The fourteenth day having arrived, after taking fifteen drops of naphtha in the usual quantity of water, the cough and perspirations had subsided, the difficulty of breathing had diminished, the appetite had improved, and the signs from percussion and auscultation were now satisfactory. The dose of naphtha was increased to twenty drops. In the course of the thirtieth day after the employment of the naphtha, the symptoms enumerated were removed, and the chest sounds and respiratory murmur were of a healthy nature.

TWENTIETH CASE.

Jane Collins, a single woman, of fifty years of age, residing at 65, Oxford Street, was admitted under my care on the first of April, 1843. She believes her family to have been hitherto free from consumption. For some years during the winter she suffered from cough, which had been worse this winter than any preceding one; attended with loss of flesh, expectoration, difficulty of breathing, nocturnal perspirations, and a sensation of heat about the palms of the hands and soles of the feet. The appetite was bad, and the bowels irregular. The anterior superior regions of the chest yielded throughout a dull sound from percussion, parti-

cularly below the right clavicle. The respiratory murmur was generally harsh and feeble, and the sounds of the heart were loud over the right clavicular region. After using the naphtha treatment, in twenty drop doses three times a-day for forty-two days, the expectoration and difficulty of breathing had wholly disappeared. The appetite was natural, and the bowels regular, and the cough was so slight, that, to let her speak for herself, she was only aware of its existence when questioned upon the subject. She felt daily that she was gaining both flesh and strength. Percussion yielded a good sound over the left side ; but rather a dull one over the right, where the respiratory murmur was a little harsh. The sounds of the heart were scarcely audible over the right side. The nocturnal perspirations and other symptoms of hectic fever had subsided for the last six weeks. She had inhaled the naphtha, as well as taken it internally during the last fortnight. At the expiration of the fifty-sixth day of the treatment with naphtha she was quite well.

TWENTY-FIRST CASE.

Jane Delacourt, a married woman, aged thirty, of 5, Market Street, having lost a father from asthma, and a brother from decline, consulted me on the eighteenth of May, 1843. When she was nineteen, she had an attack of inflammation of the bowels, through getting

wet-footed ; she had also occasionally suffered from severe pains in the head, which subsequently occurred several times. For the last six winters she had been subject to cough and expectoration ; but this winter these symptoms had recurred with more than usual severity, attended with severe pains in the head and arms. During the last six weeks she had lost flesh, and suffered from nocturnal perspiration, and the sensation of heat in the palms of the hands and soles of the feet was very troublesome. More recently the difficulty of breathing had increased, with pain between the shoulders, the bowels alternating between relaxation and constipation. The appetite was impaired, and more or less pain was experienced after meals at the pit of the stomach. The *catamenia* was natural. A *wooden* sound was the result of percussion over the left clavicular regions where the respiratory murmur was feeble and harsh. Expiration was prolonged, and the heart sounds were generally loud over the whole of the superior part of the chest. Nine days elapsed after administering the naphtha before she again visited me ; when considerable improvement had manifested itself, the nocturnal perspirations had subsided for some days, and the cough and expectoration had considerably diminished. At the end of the sixteenth day, a further amendment was evident, and percussion yielded a much better sound, the respiratory murmur being almost natural throughout the chest. The drops were now increased to twenty each dose. On

the twenty-sixth day all the symptoms of the pulmonary affection had subsided; but she was suffering from a return of the pain in the head. The application of six leeches to the temples, and the taking of a tea spoonful of drops three times a-day, composed of tartar emetic two grains, tincture of digitalis a drachm, and water an ounce and a half, soon removed the pain in the head, and on the twenty-eighth day the naphtha was recommenced. At the expiration of the thirty-eighth day of the naphtha treatment percussion yielded a clear sound, the respiratory murmur was natural, and all those symptoms for which she sought relief having ceased to distress her she withdrew herself from my care.

TWENTY-SECOND CASE

Sophia Phillips, aged twelve years, residing at 18, Marshall Street, Golden Square, had lost several relations from consumption, and about six months back her father died from the same malady. She was placed by her friends under my care on the sixth of April, 1843. She had enjoyed good health from her birth, except on one occasion, when about two years old. She then suffered from an affection of the head. About eight months since, she first began to lose her appetite; this was shortly followed by cough, expectoration, difficulty of breathing and loss of flesh, with a further decrease of appetite, an irregularity of bowels, and pain in

the abdomen and limbs. The sound from percussion was dull over the right and left clavicular regions, but in a rather less degree over the former. The respiratory murmur was feeble and harsh, particularly over the dull regions on the left side. The heart sounds were scarcely audible below the right clavicle. Ten drops of naphtha in a dessert spoonful of water three times a-day, was prescribed in her case, and hot turpentine applied as long as the pain continued to the seat of pain in the abdomen, until it became red, every other night. At the end of seven days the pain of the abdomen had ceased, and she had generally improved. After a lapse of twenty-eight days more, the cough, expectoration, and difficulty of breathing had entirely subsided, the appetite was natural, and the only complaint she had to make was general debility. Percussion yielded a clear sound throughout the walls of the chest, and the respiratory murmur was healthy. She now considered herself well, and ceased to visit me. I, however, saw her again on the twenty-first of June, when she still continued to enjoy good health.

TWENTY-THIRD CASE.

William Davis, a single man, and by trade a light porter, aged thirty-six years, residing at 66, Berwick Street, Soho, stated that having left the place of his birth in Wales, many years ago, he was unable to give any

particulars relative to his family having a bearing upon the question of a consumptive taint. For several winters he had been troubled with cough and expectoration, both of which had considerably increased of late, and attended with nocturnal perspirations, which were very severe. The palms of his hands and soles of his feet were often hot and dry. Difficulty of breathing, which was but slight a month or six weeks ago, had gradually become so severe, that he was obliged to leave his employment, and his emaciation was very great. The bowels were regular, but the appetite was bad. A dulness of sound was audible over all the superior regions of the chest, where the respiratory murmur was feeble, harsh, and in places inaudible. Below the centre of the left clavicle, a cavernous *râle* over a small space was distinctly heard, accompanied with perfect *pectoriloquy*. He was admitted under my care on the nineteenth of January, 1843, and the naphtha treatment in fifteen drop doses commenced. After a lapse of sixteen days, the cough, expectoration, and difficulty of breathing had diminished, the night perspirations and other signs of hectic fever had disappeared for rather more than a week, the appetite was natural, and a dry blowing respiration was well marked over the space occupied by the cavern. The dose of naphtha was now increased to twenty drops. On the twentieth day he had a return of all his former symptoms, owing to his getting wet, and allowing his clothes to dry on him. The

cavern, nevertheless, below the left clavicle could hardly be detected. He informed me on the twenty-seventh day, which was the next time I saw him, that the cough had disappeared for several days, and the expectoration had diminished. By the thirty-fourth day, a further amendment had evidently ensued, for percussio yielded a much clearer sound, and the respiratory murmur was improved. The cavernous *râle* was less distinct, and *pectoriloquy* could not be detected. Percussio elicited a good sound throughout the chest. The respiratory murmur was natural throughout the left lung, except at the apex; on the right it was generally healthy, and the motions of the chest were full on both sides. There was trifling expectoration, but not the slightest cough, nocturnal perspirations, or impediment of breathing.

TWENTY-FOURTH CASE.

Maria Boyd, a married woman, without family, aged twenty-four years and by occupation a dress-maker, residing at 29, Church Street, Soho, was admitted under my care on the twentieth of April, 1843. During the last twelvemonths she had become much thinner, and for some time had suffered from cough, expectoration, difficulty of breathing and nocturnal perspirations, which symptoms had been preceded by the spitting of blood. She was generally of a feeble constitution, her appetite bad, and usually subject to pain at the pit of

the stomach after taking food, accompanied with flatulence and palpitation. The *catamenia* was healthy and the bowels were regular. Above and below the clavicles, there were considerable depressions, particularly at their outer ends and the motions of the chest were generally confined. Percussion elicited a dull sound over the whole of the upper regions of the chest, but which was more strongly marked about the right clavicle. The respiratory murmur was feeble and harsh, and in places over the right clavicular region altogether inaudible. Where the respiratory murmur was indistinct, the sounds of the heart were heard with considerable force. Fifteen drops of naphtha in a table-spoonful of water were administered three times a-day, and as no amendment had taken place at the end of seven days, the dose was increased to twenty drops three times a-day. To correct a constipated state of the bowels, which had of late existed, two aperient pills were recommended to be taken occasionally. On the fourteenth day, she had become rather worse in regard to the symptoms in general, but the sounds on percussion were a little improved. A drop of hydrocyanic acid was now added to each dose of the drops, and tartar emetic ointment directed to be rubbed over the pit of the stomach three times a-day until pustules appeared. Still at the expiration of the forty-second day, all the signs of the pulmonary disease continued unabated, with the exception of the sound from percussion which was gradually

becoming clearer; and it was not until the termination of the fifty-sixth day that a diminution had taken place in the cough, expectoration, difficulty of breathing, and nocturnal perspirations, and that the appetite had changed for the better. At the end of the sixty-third day, however, the desire for food was natural. Percussion elicited a much better sound, although the respiratory murmur was rather harsh. On the thirteenth of July, being the seventy-fourth day since the treatment of naphtha was commenced, she was perfectly well, and the signs both from percussion and auscultation were of a healthy nature.

TWENTY-FIFTH CASE.

Margaret Dennis, a married woman, aged twenty-seven years, of 12, St. Ann's Court, Wardour Street, consulted me on the twentieth of May, 1843. Consumption had committed frightful ravages in her family, her mother and fourteen near relations having died from the disease. She had enjoyed tolerable health until the last four months, when she was attacked with cough and expectoration, which was shortly followed by difficulty of breathing and nocturnal perspirations, and during the last month, she had rapidly fallen away. The pulse was ninety-six, the bowels and *catamenia* were irregular, the tongue white and furred at the base, the appetite bad, and she suffered much pain at the pit of

the stomach, as well as being troubled with flatulence and palpitation; the feet were generally cold, she was weak, and her spirits were much depressed. The motions of the chest were very confined, particularly those of expansion, which on the upper part of the left side was scarcely perceptible. All the superior regions of the chest yielded a dull sound on percussion; respiration was jerking during both inspiration and expiration, and the respiratory murmur was feeble and harsh over the above spaces, and the heart-sounds were unusually loud. Fifteen drops of naphtha in a little water were ordered to be taken three times a-day. At the expiration of the twenty-eighth day, scarcely a trace of the symptoms of her chest affection remained, and the nocturnal perspirations disappeared after a few doses of the medicine. The symptoms of indigestion remained the same. The drops were increased to twenty, two aperient pills were ordered to be taken occasionally, and tartar emetic ointment rubbed into the pit of the stomach three times a-day until pustules appeared. At the expiration of the forty-second day from the commencement of the naphtha treatment, the cough, expectoration, and difficulty of breathing had entirely subsided, the appetite was natural, and she was much stronger. Percussion elicited a good sound, the jerking character of the respiration had disappeared and the respiratory murmur was more healthy.

TWENTY-SIXTH CASE.

Mary Maclaren, a married woman, aged thirty years, residing in Turk's Head Yard, Oxford Street, and of a remarkably healthy family, placed herself under my care on the second of April, 1843. For some months, she had attended upon her sick husband who was dying from consumption, and in consequence of his inability to work, had to exist for the last five or six months upon a very scanty allowance of nourishment. From infancy she had enjoyed good health, until within the last few months, when cough and expectoration came on without any apparent cause, which was followed by difficulty of breathing, night perspirations, and latterly by great prostration of strength and wasting. Her bowels were regular, her appetite bad, but she had never suffered from indigestion. A dulness of sound was the result of percussion over all the superior regions of the chest, but more particularly below the right clavicle, where the respiratory murmur was scarcely audible. Over the upper portion of the left side it was feeble and rough. Up to the seventeenth of June, which was the seventy-second day of the adoption of the naphtha treatment in fifteen drop doses, she had been slowly but steadily improving, her cough, expectoration, difficulty of breathing, and nocturnal perspirations having entirely left her. Her appetite was natural, her bowels regular, and the

physical powers improved. Percussion yielded a good sound throughout the walls of the chest and the respiratory murmur was natural. On the fifteenth of July, being the one hundredth day of the treatment, she appeared thin but in excellent health.

TWENTY-SEVENTH CASE

Martha Lord, a married woman, aged twenty-nine years, residing at 44, Clarenee Gardens, Regent's Park, was admitted under my care on the eleventh of March, 1843. She had always been ailing, and suffered from occasional cough during the last nine years, which had never been severe until this winter. For several months it was accompanied with great expectoration, difficulty of breathing, and nocturnal perspirations. The palms of the hands and soles of the feet were frequently hot and dry, and the loss of flesh was very great. The bowels were regular, the appetite bad, and pain was experienced at the pit of the stomach occasioned by taking food, with flatulence and palpitation. Percussion elicited a dull sound over all the upper part of the chest, and the respiratory murmur was inaudible in some parts of the left clavicular regions. Over the same spaces on the right side it was both feeble and harsh, where the heart-sounds were very distinct. Fifteen drops of naphtha in a little water was directed to be taken three times a-day. At the end of the thirty-fifth day, she was con-

siderably better, for the perspirations along with the other hectic symptoms had not shewn themselves for some weeks, and the cough, expectoration, and difficulty of breathing were improved. The bowels were constipated and she had pain over the region of the liver. Two aperient pills were ordered to be taken occasionally at bed time, and a mustard poultice to be applied over the painful part. On the fifty-sixth day, percussion yielded a much clearer sound, and the respiratory murmur was harsh below the left clavicle and natural on the opposite side. On the third of July, being the eighty-fourth day since the commencement of the naphtha treatment, she had no symptom remaining of the chest affection, and only complained of slight debility.

TWENTY-EIGHTH CASE.

Susan Norton, a married woman, aged thirty-seven, residing at 5, Tottenham Mews, Tottenham-court-road, who had lost both her father and mother from consumption, was admitted under my care the second of January, 1843. For six weeks she had been afflicted with cough, and last March she had a severe attack of inflammation of the lungs, since which period she had not been free from cough. During the last three months it had increased, attended with great expectoration, difficulty of breathing and perspirations.

She had spat blood in large quantities, several times since the autumn, and was formerly a stout woman, but had now become greatly reduced in flesh, and she suffered from pain on both sides of the chest. The pulse was a hundred, and weak, and palpitation of a very severe kind came on occasionally; the tongue was white and furred at the base, the appetite bad. The bowels, however, were regular. Percussion yielded a clear sound, over the right clavicular regions; but very dull over the left, where the respiratory murmur was harsh, and in parts inaudible. On the other side it was puerile. Expiration was prolonged. She was ordered to take ten drops of naphtha in a table-spoonful of water, three times daily, and in the course of seven days the pulmonary symptoms had undergone general amendment. Within the last few hours she had an attack of diarrhæa, and the palpitation was severe, which yielded in the course of two days to a double dose of the naphtha, in which were dissolved two grains of the hydriodate of potash. At the end of thirty-five days, the cough, expectoration, and difficulty of breathing, had almost disappeared, and she had scarcely suffered from perspiration since she commenced the naphtha treatment. After the fifty-sixth day, she complained of sickness, pain in the head, and violent palpitation with a return of the cough, which she attributed to the last medicine she had taken, which was very nauseous and burning, as before she commenced it she con-

sidered herself well. Her suspicions proved correct, for the naphtha she had on this occasion taken, had not been obtained at the usual place, and was determined to be a highly deleterious spirit. At the termination of the seventy-eighth day of the naphtha treatment, percussio yielded a natural sound over all the superior part of the left side of the chest, where the respiratory murmur was healthy ; her appetite was natural.

TWENTY-NINTH CASE.

Mr. Zillwood, a married man, aged forty-two years, and master of the Blind School, Queen Square, Bloomsbury, shortly after his birth was bereft of his mother's care, who died of consumption, and [several other branches of his family were also cut off by that disease. Through his usual medical attendant, Mr. Whidborne, I was consulted on the twenty-fourth day of May, 1843. As a child he was not strong, and at no period of his life had he enjoyed robust health. He was very liable to take cold, which always terminated in cough, and for several winters he had suffered from expectoration as well as cough. He had been long subject to indigestion, his bowels became relaxed from very slight causes, and his appetite was rarely good. About two months ago he had a severe attack of acute rheumatism, which gave way to the usual remedies.

He had chronic pains in several joints of the upper extremities, which were still a little swelled. The cough, expectoration, difficulty of breathing and nocturnal perspirations were severe, and his general appearance betrayed considerable emaciation. Percussion nowhere yielded an unhealthy sound, except over the upper region of the chest on the right side, where great dulness existed, and the respiratory murmur was scarcely audible, the dry crackling *râle* being distinct, whilst on the opposite side it was puerile. Below the dull space on the right side, the sounds of the heart were very evident, and an abundance of sibilant, sonorous, and sub-mucous rattles were present. He was ordered a saline draught, and a pill containing a grain of calomel, and a third of a grain of opium, every six hours, and a little compound iodine ointment to be rubbed into the painful parts night and morning. In the course of nine days, during which period his mouth became sore, a considerable amendment was perceptible in the rheumatism, and the cough and expectoration had diminished. The same dull sound below the right clavicle was the result of percussion, and the only improvement in the pulmonary symptoms were those which indicated bronchitis, namely, the sibilant, sonorous, and sub-mucous rattles; these were almost replaced by a healthy respiratory murmur, which continued to be nearly inaudible below the right clavicle. In the course of twelve

days from the commencement of the naphtha treatment, which was given in doses of fifteen drops, the nocturnal perspirations ceased, followed by diminished cough, expectoration, and less difficulty of breathing, the appetite was natural, and the bowels regular. Percussion yielded a much better sound below the right clavicle, where the respiratory murmur was distinctly audible, with an entire absence of the dry crackling *râle* and a diminution of the sounds of the heart, whilst on the left side, the puerile character of the respiratory murmur had almost disappeared. The dose of the naphtha had been increased to twenty drops for some days. On the twenty-sixth of June, being the thirty-third day of the treatment, I learned from Mr. Whidborne that the patient continued to improve, and that on one occasion being for a day only accidentally without his medicine, an evident change for the worse ensued, which was quickly removed by resuming the medicine the following day. Upon inquiry lately, I find he is quite well, not having had for some time an occasion to use the naphtha.

THIRTIETH CASE.

Catherine Lay, a single woman, aged twenty-six years, following the occupation of dress-maker, and residing at 22, Wells Street, was admitted under my care the fifth of June, 1843. She had very good health up

to the last two or three years, since which time, in the winter, she had been harassed with cough. This led to considerable expectoration, lately followed by difficulty of breathing, nocturnal perspiration and great loss of flesh, and an obstinate constipation of the bowels; but at no period had she suffered from indigestion. Percussion yielded a dull sound over the left clavicular regions, where the respiratory murmur was feeble and harsh. Over the same spaces on the opposite side, it was puerile, and the sound from percussion clear. Fifteen drops of naphtha in a table-spoonful of water having been administered three times a-day, at the expiration of twenty-eight days, the cough, expectoration and difficulty of breathing were entirely removed, and the nocturnal perspirations had subsided after a few doses of the drops had been taken. The bowels, however, were confined, the dose of naphtha was now increased to twenty drops, and to correct the bowels, two aperient pills were ordered to be taken occasionally. On the forty-second day since the treatment with naphtha was commenced, percussion yielded a healthy sound throughout the left superior regions of the chest, and the respiratory murmur was healthy.

THIRTY-FIRST CASE.

Mapella Taylor, a married woman, aged twenty-two years, residing at 22, King Street, Soho, was admitted

under my care the eighteenth of February, 1842. She had always been ailing, and about two months ago was attacked with cough, hoarseness, and expectoration, which was almost immediately followed by nocturnal perspirations and loss of flesh, in addition to which, she now had occasional pains in the left side of the chest; the pulse was a hundred, and small, the tongue shining, and the anterior papillæ enlarged. A fortnight ago, she had an unusually severe bowel attack, which she had suffered from, although in a lesser degree, every two or three weeks for several years. The appetite was moderate, depressions existed above and below both clavicles, yet the chest was in good proportion. Percussion elicited generally a dull sound more or less throughout the upper portions of the walls of the chest, but it was more strongly marked over the left clavicular regions, where the respiratory murmur was very feeble. On the opposite side, it was less feeble and harsh, but towards the outer end of the clavicle it was almost natural. The sounds of the heart in the upper region of the chest were generally loud. Fifteen drops of naphtha in a table-spoonful of water were ordered to be taken three times a-day. After the lapse of twenty-eight days, her cough was less in intensity, and the hoarseness had ceased, and she had experienced no return of the customary attack of diarrhæa. At the end of the sixty-third day, a further improvement was manifest in the diminished quantity of expectoration

and lesser difficulty of breathing, and the signs, both from percussion and auscultation, had improved. At the expiration of the one hundred and fifth day, the cough had ceased, as well as the expectoration, the appetite was natural, and the bowels were in a healthier condition than they had been for several years. Percussion elicited generally natural sounds, and the respiratory murmur had a healthy character.

THIRTY-SECOND CASE.

Susan Jackson, a married woman, aged twenty-three years, residing in Upper Rupert Street, Haymarket, and of a very healthy family, commenced the naphtha treatment in twenty drop doses on the fourth of April, 1843. About six months ago, she completed a three months' close attendance as a nurse upon her sister-in-law, who died from consumption. Shortly after the sister-in-law's death, a dry cough commenced, which gradually led to expectoration and difficulty of breathing, followed more recently by nocturnal perspirations and considerable loss of flesh. Her bowels were regular, her appetite very bad, and her spirits very much depressed. Her hair and eyes were dark brown, her cheeks fresh coloured, and skin semi-transparent. There was a dulness of sound over all the upper part of the chest, particularly on the right side, where the respiratory murmur was scarcely

audible. On the opposite side, over the clavicular regions it was feeble. The sounds of the heart were loud on both sides. At the end of the twenty-eighth day great improvement had ensued, as the cough was but slight, as well as the expectoration and the difficulty of breathing. The perspirations, though less frequent, had occurred more often during the last week than during the two that preceded it. The appetite was improved, the signs from percussion and auscultation were more satisfactory. After the lapse of seventy days from the commencement of the naphtha treatment, the cough had entirely subsided, as well as the difficulty of breathing and perspirations; leaving only a slight expectoration remaining. Percussion yielded a good sound generally, and the respiratory murmur was almost natural.

THIRTY-THIRD CASE.

Sarah Harrison, a married woman, aged twenty-four years, residing at 8, William Street, Regent's Park, was admitted under my care the first of June, 1843. She had not suffered from ill health, until within the last two years, when she had repeated attacks of cough and cold. About two months ago, the cough and expectoration occurred without any apparent cause, followed by difficulty of breathing, considerable emaciation, and nocturnal perspirations. The bowels were confined, the appetite bad,

and pain was experienced at the pit of the stomach after taking food, followed by flatulence and palpitation. Percussion yielded a dull sound throughout the upper regions of the chest, the respiratory murmur was feeble and harsh over the same spaces, and in parts below the right clavicle, where the heart sounds were very distinct, it was scarcely audible. Fifteen drops of naphtha in a table-spoonful of water were ordered to be taken three times a-day and two aperient pills occasionally. At the end of the twenty-first day the cough, expectoration, and difficulty of breathing had nearly ceased, and the perspirations entirely, and the signs from percussion and auscultation were more satisfactory. The dose of naphtha was now increased to twenty drops three times a-day. After the expiration of the forty-fifth day of the naphtha treatment, there were no remains of the pulmonary disease, the sounds from percussion as well as auscultation were healthy and the different symptoms had subsided.

THIRTY-FOURTH CASE.

Jane Williams, a married woman, aged twenty-three years, residing at 13, Crown Street, Soho, having lost several members of her family from consumption, consulted me on the twenty-third of May, 1843, and complained of cough, expectoration, and difficulty of breathing, which came on simultaneously last Christmas. During the last six or eight weeks, she experienced

severe nocturnal perspirations, and had become spare in body and weak in strength. The bowels were regular, the appetite bad, and great pain after partaking of food was felt at the pit of the stomach, with frequent palpitations. Over all the superior part of the chest there was dulness of sound, which was strongly marked over the right clavicular regions. The respiratory murmur was feeble and generally harsh. Tartar emetic ointment, to be rubbed into the pit of the stomach three times a day until pustules appeared, and naphtha in fifteen drop doses, was first administered; and at the end of seven days there was less cough and perspiration, and the pain which was felt after taking food had ceased. By the fourteenth day she had further improved, and her appetite she said was better than it had been for several years. On the nineteenth day, she was much worse; all the unfavourable symptoms had returned, which I attributed to her taking cold during a shower, while enjoying an airing. The tartar emetic ointment was, in consequence, again had recourse to, and the dose of naphtha was increased to twenty drops three times a-day. On the twenty-ninth day, she had made good her lost ground; and at the expiration of the fiftieth day after the naphtha treatment had been pursued, her cough had left her, the expectoration was hardly to be noticed, and the difficulty of breathing and nocturnal perspirations had ceased. The sound from percussion and auscultation was natural.

THIRTY-FIFTH CASE.

Ann Jackson, a single woman, aged twenty-two years, residing at 10, Gerrard Street, Soho, consulted me on the first of June, 1843. She had lost a sister from consumption, and a brother was then labouring under that disease. She had enjoyed good health until last winter, when she was attacked with cough and expectoration, which had gradually increased up to the present time. She had not suffered from nocturnal perspirations, and but slight difficulty of breathing, and in other respects her health was good. A dull sound was evident over the right clavicular region only, where the respiratory murmur was harsh and feeble; but over the same region, on the opposite side, it had a puerile character. After taking fifteen drops of naphtha in a table-spoonful of water three times a day, at the end of fourteen days the cough and expectoration had nearly ceased, when the dose was increased to twenty drops three times a day. On the fifth of July, being the thirty-fifth day since the commencement of the treatment with naphtha, the right side presented a good sound on percussion, and the respiratory murmur had resumed its healthy character; in a word, she was quite well.

THIRTY-SIXTH CASE.

Sarah Lable, a single woman, aged twenty-two years,

following the occupation of a dressmaker, at 55, Museum Street, was admitted under my care on the second of June, 1843. She was easily excited, and the slightest emotion produced head-ache. For the last two months, she had cough in a very severe degree, expectoration, and difficulty of breathing, accompanied with burning flushes in the face, hands, and soles of the feet. The bowels were generally constipated, the appetite very bad, and for the last month she had been troubled, after taking food, with pain at the pit of the stomach, with sometimes an attendant sickness. There was dulness of sound on percussion over all the upper regions of the chest. The respiratory murmur was generally harsh and feeble; and below the left clavicle it was in parts inaudible, as well as at the apex of the left lung. On the right side, the sounds of the heart were distinct. Fifteen drops of naphtha in a table-spoonful of water having been taken three times a-day, after a lapse of thirty-one days all the pulmonary symptoms had given way, but she complained of great pain over the forehead. Eight leeches were then applied to the temples. At the end of the forty-second day of the treatment with naphtha, being the seventh of July, the pain in the head had ceased, the sound from percussion was healthy, and the respiratory murmur natural.

THIRTY-SEVENTH CASE.

Ann Young, a married woman, aged thirty-five, without children, residing in Silver Street, Bayswater, and of a consumptive family, having lost her mother from that disease, was admitted under my care the twenty-third of March, 1843. She stated that about three months since, she was attacked with cough, which had gradually increased up to the present time, accompanied with great difficulty of breathing and constant night perspirations. She had lost much flesh, and lately had suffered severe pain at the pit of the stomach after meals, which was attended with almost constant eructations. She had scarcely any appetite. She complained of a distressing uneasiness at the top of the head, which she described as something more than ordinary pain however severe. It was not affected by heat or cold, neither was it better or worse at any particular hour of the day or night. The bowels and *catamenia* were regular. A dull sound was the result of percussion over the superior part of the chest, both posteriorly and anteriorly, and the respiratory murmur was generally harsh and feeble over the left sub-clavicular region; the dry crackling *râle* was also present; and over the same space on the opposite side, the sounds of the heart were very loud. Twenty drops of naphtha in a table-spoonful of water were directed to be taken three times a-day. After a period of seven days, considerable improvement

was evident in the disease of the chest, but no amelioration in the head affection had taken place; a little compound iodine ointment was therefore ordered to be rubbed into the scalp night and morning. The cough had entirely ceased by the twenty-first day, as well as the nocturnal perspirations, but the sensation in the head was not at all improved. Six leeches were applied to the temples without effect, and on the thirty-fourth day she complained of sickness, palpitation and fainting, with an increase of the disagreeable sensation in the head. She attributed the change for the worse to the drops she had taken, which differed both in taste and smell to those she had formerly used. Upon inquiry, it appeared that an impure naphtha had been substituted for that she had been accustomed to take. Percussion yielded a slightly dull sound over the left sub-clavicular region, where the respiratory murmur was heard, while elsewhere it was natural. The sounds of the heart were heard but faintly below the right clavicle. Two small blisters were directed to be applied behind the ears, and kept open for a week with savine ointment. On the fiftieth day, no symptom remained indicative of the pulmonary disease, or of indigestion, but the sensation in the head still continued, for the relief of which, ten ounces of blood were removed from the back of the neck by cupping, and on the seventy-fourth day of the naphtha treatment, feeling herself quite well, she withdrew from my care.

CHAPTER VIII.

GENERAL REMARKS.

BESIDES the cases related, I have under my care several patients, whose lungs have been subject to considerable destruction, who are doing so well as to promise, without being unnecessarily sanguine, ultimate recovery; but as they are still prosecuting the naphtha treatment, I have thought it right to withhold their publication. I may, however, select one from the number, the wife of a medical man. (18) At the time the naphtha treatment in the usual dose and stated periods was commenced, which was two months since, she suffered from severe cough and expectoration, difficulty of breathing, and copious perspirations, and had considerably wasted in flesh. There was dulness of sound generally, but below the right clavicle it had a wooden character, where a large gurgling *râle* with complete *pectoriloquy* existed; on the left side the motion of expansion was much greater than on the right, and the respiratory murmur was remarkably

(18) She had been under the care of one of the most scientific physicians in London, and who had given a similar diagnosis of her case.

harsh; the appetite was deficient. In other respects she was healthy. After five weeks the cough, expectoration, and difficulty of breathing had considerably diminished, the perspirations had entirely ceased after a few doses of the medicine had been taken, and the appetite had become natural. The step was firm, and the voice altered from a shrill note to one of a stronger and more healthy tone. The wooden sound below the right clavicle had considerably improved, and the respiratory murmur below the left had put on a healthy appearance, having entirely lost its harsh character. The gurgling *râle* was replaced by a blowing murmur in the left sub-clavicular region, where *pectoriloquy* still existed, although limited in space.

M. Louis(19) has justly observed in relation to the curative treatment of Pulmonary Consumption, and it applies with equal force to its recognition, that "those who would assist in the solution of the problem, should be perfectly acquainted with the natural progress and symptoms of the disease, and the physical diagnosis." I have repeatedly been applied to for advice for a specified disease, when, from an examination of the chest, Pulmonary Consumption was quite manifest, although it had not been detected by the medical men under whose care they had previously placed themselves. In some instances, in consequence of the absence of either cough or expectoration, the disease even

(19) Recherches sur la phthisie, seconde édition, par P. Ch. Louis, 1843.

makes considerable progress, without the patient having apparently the remotest idea of its existence. Although cough and expectoration are usually present when tubercles are developed in the lungs, it now and then occurs, when the disease has considerably advanced, that one or other of these symptoms is wanting, the deficiency of the cough being the more rare of the two. I have now a very intelligent man under my care, who has lost his father and brother from consumption, and whose lungs both right and left are studded with tubercles, his symptoms comprising expectoration, difficulty of breathing, nocturnal perspirations, and general emaciation, and yet he believes himself free from the disease, because he had not the slightest cough, his application for relief being founded on symptoms which he considered arose from an enlargement of the liver. This absence of cough may arise from idiosyncrasy, or from a part of the lungs unaffected by disease performing the duties of the diseased portion so well, that the presence of the tubercles are scarcely felt in the obstructed bronchi, until the disease has committed such ravages in the lungs as not to admit of reparation. Hence the necessity of recognising and treating the disease in its infancy, when the probability of recovery is almost reduced to a certainty, cannot too often and too forcibly be urged; for if allowed to advance insiduously

until large portions of the lungs are broken up, the prospect of cure must be necessarily uncertain.

No doubt exists in my mind that the absorbents have the power of removing tubercles when they exist in the form of miliary granulations, and even when they are further advanced, and of a crude nature; except in those cases where the absorbents cannot reach them, a condition in which the only part that comes under the power of the absorbents is the circumference, whilst the central portion being itself unorganised is too far removed from the neighbouring tissues to be controled by them, and thus remains in its solitary and undisturbed situation for an indefinite period. Somewhat similar to that of a musket ball when surrounded by the walls of a cyst, which is then harmless. In fact, can any other conclusion be drawn, where dulness of percussio once existed and subsequently became clear—where respiration was feeble and harsh, and afterwards altered to a soft breezy murmur—and where *pectoriloquy* was evident, and then ceased. A general restoration of health being the final result. Many of my cases tend to confirm this view, for although perfect health was restored, and every organ of the body performed its healthy and accustomed functions undisturbed, nevertheless in some cases a little dulness remained; and here and there auscultation revealed a respiratory murmur somewhat

feeble, and not unfrequently accompanied with slight harshness and prolonged expiration. In such cases, I conceive, the tubercular deposit had reached the stage of crudity prior to the commencement of the treatment, when it is usually found in examinations of the chest after death in masses of considerable magnitude.

Of the thirty-seven cases it will be seen five were males, and thirty-two females, and the following table will show, at a glance, at what period of life the disease most frequently occurred.

Between the age of	10	and	15	1
„	15	„	20	5
„	20	„	25	12
„	25	„	30	10
„	30	„	35	5
„	35	„	40	1
„	40	„	45	2
„	45	„	50	0
„	50	„	55	1
				37

The proportion of females to males, then, is three to one, but on taking a review of all the cases which have been under my treatment the proportion is six to one, the difference being due to the fact that the men, when no longer capable of supporting themselves by labour, were pretty generally removed by the authori-

ties here, to their respective parishes. This occurred to three Irishmen, two Scotchmen and several Englishmen, after they had been a few days under my care.

The disease was found to be most extensive in the left lung of eighteen, while in one case it appeared to be equally developed in both lungs. These facts are not in accordance with the observations of authors generally on Pulmonary Consumption, but they agree with those of Dr. Cowan,(20) an accurate and faithful observer. There are not, however, at present, sufficient data to enable us to arrive at any positive conclusion on this head.

An hereditary taint was distinctly traced in nineteen cases, and probably a greater number may be ascribed to this cause, from the known reluctance consumptive patients have to admit of such a predisposition; conceiving, as I have before stated, that the admission would of itself be the means of sealing their fate, and thus rob them of that uncertainty upon which they appeared to believe their only hope of safety apparently depended. They frequently could not remember of what disease their relatives died, or they called it asthma, or otherwise, and if they admitted the disease to have been consumption they modified that admission by alleging it was entirely brought on by cold or drunkenness, and that, with this exception, the family had been

(20) Provincial Medical Journal, No. 140, p. 185.

remarkably healthy. With regard to other causes, two were attributable to contagion, and the remainder were involved in too much obscurity to enable me to obtain a result.

The progress of improvement in the physical signs, when sufficiently marked, invariably commenced with an amendment of the sounds arising from percussion. In no case did they appear to begin by those of auscultation; consequently I am induced to form the opinion, that as diagnostic signs those derived from auscultation take precedence of those from percussion, or in other words, that changes such as prolonged expiration and very slight feeble and harsh respiration may be detected by auscultation, when the sound elicited by percussion is not sufficiently appreciable to lead to any useful conclusion considered apart from auscultation.

In one remarkable case, that of the twenty-fourth, the treatment was commenced on the twentieth of April, and no amelioration ensued until the second week in June, except some slight improvement in the sound resulting from percussion; after which period, however, amendment proceeded rapidly, and on the thirteenth of July, no trace of the disease existed. In a few of the cases, the improvement commenced in less than a fortnight, but in the majority of the cases, improvement was manifest in the course of forty-eight hours.

It will be seen that the recorded cases have occurred

within the last seven or eight months; during which period, the greater part of the winter, the spring, and a portion of the summer have passed by. As a whole, the late winter, it must be admitted, was unusually mild; but January was as severe and trying a month for pulmonary affections as could have possibly occurred, and May and June, owing to the unsettled state of the weather, were far from being healthy. In appreciating, therefore, the value of the Naphtha treatment, it cannot be denied that there were times which threatened to hasten the progress of the disease and mar my prospects of success. This, however, instead of being a source of grievance, was one of satisfaction; for it placed beyond a doubt any such belief that it was attributable to the favourable state of the weather, which perhaps otherwise would have shaken my confidence, and thus the publication of my Essay must unnecessarily have been postponed until the close of a more trying season.

Almost immediately after Naphtha has been administered, an occasional rising of the medicine is perceptible in the mouth and throat, similar to that which occurs after a dose of castor oil. This is sometimes followed by nausea, and now and then vomiting supervenes. At other times it acts, but much more rarely, as an aperient. But when these effects occur, they usually subside in a day or two. It not unfrequently produces a glow in the region of the stomach, which extends

over the chest and creates a sensation of cheerfulness and a greater freedom of breathing. It appears deserving a high rank among tonics; for in most of the cases in which it has been employed, a natural appetite was in a short time established. No remedial agent that I am acquainted with possesses such power over the colligative perspirations of pulmonary consumption; as a few doses, in most instances, appeared sufficient to effect their removal. Another fact worthy of remark, is the absence of diarrhæa in all cases, which may be accounted for upon the supposition that tubercular deposit ceases to take place in the mucous track of the intestines. And even in those cases where diarrhæa in the first instance existed, it readily yielded to the Naphtha treatment. The thirty-third case is a good example of this remark. Head-ache, particularly when the bowels are confined, is sometimes the effect of the Naphtha treatment, and if aperients fail to give relief, a mustard poultice should be applied to the back of the neck, or a few leeches to the temples, or behind the ears. It will, however, be very seldom necessary to suspend the employment of the Naphtha from this cause.

Naphtha, like all other medicines, will be found to require aid and support from other therapeutical agents, in those particular cases in which Pulmonary Consumption is complicated with other diseases; and it is satisfactory to know that it is not incompatible with hydro-

cyanic acid, or hydriodate of potash. Naphtha, as a remedial agent, was wholly unknown nine months ago, consequently it is not probable that the full extent of its value has yet been ascertained. Single-handed, if I may be allowed the use of the expression, it has cured Pulmonary Consumption in almost every case in which it has hitherto been used, when the disease has been treated in an early stage. And from what I have more recently observed, although I do not consider myself justified at present to publish it, I am most sanguine that even in the latter stages of the disease a restoration of health may generally be calculated upon.

THE END.

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